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**EVALUATION OF PLANNING
AND CRIME ANALYSIS UNITS
IN ILLINOIS**

**Final Report
C-228**

August 1978

**Prepared for
ILLINOIS LAW ENFORCEMENT COMMISSION**

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CHAPTER I
INTRODUCTION

The way to progress in this field is not through the application of emotionally based opinions. The way is through thorough and painstaking research; the development of planned operations based on research; and the careful measurement of the effect of such plans to determine whether they do or do not serve the purpose for which they were designed, and why.¹

A. PLANNING RESEARCH AND CRIME ANALYSIS UNITS -- A BRIEF HISTORY OF PROGRAM FUNDING IN ILLINOIS

Realizing the need to improve police planning and crime analysis on the local level, the Illinois Law Enforcement Commission created a special funding category in its 1974 plan. The program category is succinctly described in a commission document:²

Police Planning Research and Crime Analysis units were initially established in ILEC's 1974 plan to encourage police departments to develop administrative and operational planning, with a focus towards improving the utilization of departmental resources (personnel and equipment) in a cost-effective and offense-directed manner.

While both of these units concentrated on various methods for improving police operations and developing a general patrol allocation and deployment system (based on the incidence of criminal offenses, calls for service, response times and traffic enforcement, etc.), Crime Analysis Units were additionally charged with developing and analyzing specific crime-offender-target information.

¹Gourley, G. Douglas and the faculty of the Department of Police Science and Administration of California State College at Los Angeles, Effective Police Organization and Management, Volume IV, as submitted to the President's Commission on Law Enforcement and Administration of Justice, 1967.

²The Illinois Law Enforcement Commission Request for Proposal, "Evaluation of the Process and Impact of the Police Planning Research and Analysis Units, Crime Analysis Units and Offense Directed Resource Utilization Units in Illinois", June 27, 1977.

In 1977, a third type of police planning program, the Offense Directed Resource Utilization Unit, was developed and included in ILEC's plan. This program was designed to choose a specific crime-offender-target and develop a crime specific analysis and tactical response to it.

To date, ILEC has funded nine such programs: Five Police Planning Research and Analysis Units, Two Crime Analysis Units, and Two Offense Directed Resource Utilization Units.

The nine projects funded were in Cahokia, Champaign, Danville/Vermilion County, Deerfield, Downers Grove, Elgin, Lake Forest, Kane County, and Zion. The purpose of this publication is to provide an assessment of the accomplishments of the crime analysis and planning units funded by ILEC. As a result of the assessment, recommendations pertaining to statewide category area funding and the implementation of the planning/analysis function on the local level have been developed.

The following section gives the background of the evaluation effort in order to provide the reader with a complete introduction to the scope of effort contained within this volume.

B. BACKGROUND OF THE EVALUATION REPORT

On June 27, 1977, the Illinois Law Enforcement Commission (ILEC) issued a Request for Proposal (RFP) entitled "Evaluation of the Process and Impact of the Police Planning, Research and Analysis Units, Crime Analysis Units and Offense Directed Resource Utilization Units in Illinois". Planning Research Corporation/Public Management Services, Inc. (PMS) submitted a written proposal in response to the RFP in August 1977 and was ultimately selected to perform the evaluation for ILEC.

The evaluation began during the first week of January 1978 when PMS staff met with ILEC representatives. After several informal meetings between ILEC and PMS staff, a thorough review of the grant files was conducted by PMS and pertinent information on each project was copied for use as the basis of discussion during on-site visits.

During the remainder of January and February, on-site visits were made to each of the nine units selected for evaluation. A working paper was prepared on each unit which covered the individual goals and objectives and proposed unit activities as contained in grant applications; the activities as described in progress reports to ILEC; and finally, the activities as observed by the evaluation staff during the on-site visit. The working papers represented the comprehensive set of descriptive information described in the proposal.

The working papers were not designed to be evaluation reports per se, but were constructed in an effort to document all project activities of the units. They also contained critical observations of project activities pointing out the shortcomings of the projects.

The working papers were submitted to project personnel and the respective Chiefs of Police for their review. The working papers were then submitted to ILEC as part of the interim report dated April 1978. The interim report provided a preliminary analysis and review of each unit. The analysis was based on the working papers together with the responses of project personnel. Each working paper (as corrected by comment from project staff) was submitted as separate but companion volumes to the interim report. The interim report identified four projects that were worthy of further evaluative review. This is not to say that the other five projects were not meritorious, but because of the funding cycle or nature of the local program, it was jointly decided by ILEC and PMS that further review beyond the initial analysis of the working paper would not be particularly productive.

This final report provides a summary of all nine projects as contained in the interim report. It also documents our efforts to construct program area recommendations and guidelines for planning and crime analysis programs.

Chapter II gives a summary for each of the nine projects while Chapter III provides an overall assessment. Chapter IV gives recommendations for ILEC's consideration for future funding of similar projects. Chapter V is a state of the art of police planning and crime analysis which is intended for potential grantees. Finally, Chapter VI provides a framework for a management information system for planning projects.

CHAPTER II
A DISCUSSION OF INDIVIDUAL ILEC FUNDED
PLANNING AND CRIME ANALYSIS PROJECTS

A. INTRODUCTION

As discussed in Chapter I, one of the first activities of the evaluation effort was to make site visits to each of the nine projects under review. A working paper was prepared on each unit's activities as contained in the grant applications; the progress reports to ILEC; and finally, the activities as observed by the evaluation staff during the on-site visits. The working papers were then submitted to project personnel and the respective Chiefs of Police for their review and comment.

After review and comment by project personnel, the working papers were submitted to ILEC as part of the interim report. As a result of the interim report, the decision was made to conduct a more extensive evaluation of four of the projects: Danville, Lake Forest, Deerfield, and Elgin. Of the other five, three were dropped from consideration because they had been completed for some time, one was dropped because it was just getting started, and one was dropped because no further evaluation was considered necessary.

To facilitate the individual summaries, a matrix of project activities has been developed. The matrix consists of eight major column headings as described below. See Table 1 on Page 9 for an example.

- Project Activities. This column lists the activities undertaken within each project.
- Planned Activities. This column is divided into two subcolumns. The first indicates whether the activity was mentioned in the grant application. The second indicates whether the activity was initiated and later reported to ILEC in quarterly reports. The two columns provide a review of the planned versus the actual activities undertaken by a project.
- Degree of Implementation. Often component activities are planned but must be subsequently abandoned or can only be partially implemented. In the "Degree of Implementation" column, each project is assigned to one of the following categories:

- Completed. The activity has been completed. Results may have been implemented and the project personnel will usually have been involved in the implementation. For example, a monthly crime report may have been developed. Project personnel may then be given the responsibility to produce and distribute the report.
 - Partially Completed. This category describes an activity which is well on the way toward completion, but has not yet reached the stage where it is of significant benefit to the agency.
 - Discontinued. The activity results were implemented but subsequently discontinued.
 - Abandoned. The activity was discussed in either the grant application or reports to ILEC, but no attempt at implementation was made and the activity was ultimately abandoned.
- Common Objectives. Through a review of the activities of all nine projects, PMS developed a set of common objectives. This column relates each activity to one or more of the common objectives defined by PMS.
 - Objective 1: Improve the Generation of Information
 - Objective 2: Improve the Department's Analysis Capabilities
 - Objective 3: Improve the Deployment of Personnel
 - Objective 4: Improve the Budget Preparation Procedures
 - Objective 5: Improve the Utilization of Equipment and Facilities
 - Objective 6: Improve Standard Operating Procedures
 - Objective 7: Develop Officer Performance System
 - Objective 8: Contribute to Increased Community Security Through the Application of Crime Prevention and Loss Prevention Measures
 - Tenure of Activity. The tenure of activity describes the concentration of effort needed to implement and maintain a given program. Some activities, such as preparing a procedures manual or writing a comprehensive general order are essentially one-time efforts. Other activities such as crime analysis are on-going and require continual attention. The descriptive categories for "Tenure of Activity" are further defined below:

- One-Time. An activity that is the primary responsibility of the Planner/Analyst and receives concentrated attention for a period of time but does not require the on-going attention of the Planner/Analyst after completion.
- Limited Activity. An activity of a planning nature in which the Planner/Analyst only has a peripheral interest, not the primary responsibility.
- On-Going Activity. An activity which requires a given amount of attention for maintenance or continued update of information after the initial implementation effort.
- Scope of Effort. Many of the activities of the various projects were minor, requiring little expenditure of time. Other activities required a large percentage of a planner's time either on a short-term or long-term basis. The categories defining scope of effort are as follows:
 - Minor Effort. A reported activity requiring less than 40 hours to complete and implement.
 - Significant Effort. An activity requiring several weeks to complete and implement.
 - Major Activity. An activity requiring two or more months to develop and implement.

The next five sections discuss the projects in Downers Grove, Zion, Cahokia, Champaign, and Kane County. Then the four projects that received more intensive evaluations are discussed: Danville/Vermilion County, Lake Forest, Deerfield, and Elgin.

B. DOWNERS GROVE

Introduction

Grant number 1981 was awarded to the Downers Grove Police Department to develop a planning and research unit out of project area 10h, 1975 funds. The total cost of the grant was \$28,192. The funding period was from April 1, 1976 through March 31, 1977 with an extension through June 30, 1977.

The Downers Grove Police Department is comprised of 50 sworn officers providing service to a population of approximately 40,600. The grant provided funding for a full time Director of Planning, a position which was ultimately assigned to a Lieutenant within the Department.

Project Activities

Table 1 provides a summary of the activities either planned or engaged in by the Downers Grove Police Department. Downers Grove is one of two programs funded for a one-year period only. A review of Table 1 reveals that in terms of total grant activity, the planner was extremely busy during the project. As we review the table, we can see that project activities one through thirteen were mentioned in the grant application. Of these thirteen activities, only three can be called completed. Seven were partially completed and three were abandoned, at least in terms of the planner's participation.

It should be explained that many of the activities listed in the grant application were related to the Department's planned process for records automation, which was part of a coordinated city-wide effort. The planner was to coordinate the automation effort for the Department. Initially, the grant funding was to begin in September 1976, but funding did not actually start until April 1976. The delay caused problems in that the records automation continued within the city. A result was that the programmer was unable to define and prioritize the Department's immediate data processing needs. Consequently, five of the first thirteen activities are listed under the "Scope of Effort" column as being of a minor effort and in two other activities no grant resources were expended. Three of the first thirteen projects constituted a "significant effort" while three others constituted a "major effort."

From the "Planned Activity" column, we can see that activities numbered 14 through 25 were developed after the grant was funded. Ten of these can be considered to be completely implemented and two are classified as partially completed. Three of the last twelve were of "major" proportion; three required a "significant" level of effort; while the remaining six required

Table 1

PROJECT ACTIVITY OVERVIEW FOR DOWNERS GROVE

PROJECT ACTIVITIES	PLANNED ACTIVITY		DEGREE OF IMPLEMENTATION.	ACTIVITY RELATED TO COMMON OBJECTIVES	TENURE OF ACTIVITY	SCOPE OF EFFORT	COMMENTS
	Detailed In Grant Application	Initiated After Project Started					
1. Develop a manpower allocation and deployment system	Yes	No	Partially Completed	Objectives 1, 3, 4, and 7	One-Time	Significant	Accomplished "first steps" in geocoding (grid mapping). Little change in operations on pre-post grant basis.
2. Evaluate all personnel - Develop "best use" profile	Yes	No	Partially Completed	Objectives 3 and 7	One-Time	Significant	Intent of this effort never materialized. Department conducted 3 or 4 minor studies of peripheral relationships.
3. Provide cost analysis on all motorized equipment	Yes	No	Partially Completed	Objective 5	One-Time	Significant	Planner did a feasibility study on motorcycle usage for traffic enforcement and a squad car usage study.
4. Provide cost analysis of EDP for use by Planning and Records Units	Yes	No	Partially Completed	Objectives 1-3	Limited	Major	Conversion to ADP was well underway by the time grant was finally awarded.
5. Institute a general review of all office equipment in relation to projected changes in data collection storage and use	Yes	No	Partially Completed	Objective 1	Limited	Minor	Completed outside of the general purview of the planning officer.
6. Develop statistical analysis on each unit of the Department	Yes	No	Completed	Objectives 1-5	On-Going	Major	As a result of records automation, Department now has four monthly reports in support of administration and operational planning.
7. Develop and implement a series of operational plans intending to attack a specific criminal activity	Yes	No	Completed	Objectives 1-3, 5, & 7	On-Going	Major	Crime analysis data provided to operational supervisors - Referred to as "Target Incident Program".
8. Review of Administrative or noncriminal planning needs	Yes	No	Completed	Objective 4	Limited	Minor	Most budgetary and other administrative planning accomplished outside of the general purview of assigned planner.
9. Evaluate present facilities and develop an interim plan for improving the flow of information	Yes	No	Partially Completed	Objective 1	One-Time	Minor	What was accomplished was generally outside of the main grant activities.
10. Provide a suggested design for an EDP center in a proposed new police facility	Yes	No	Abandoned	Objective 1	Limited	Minor	Planner prepared a document on police facilities, however, it was prepared prior to grant.
11. Review methods of budget preparation -- develop criteria & methods of control.	Yes	No	Partially Completed	Objective 4	Limited	Minor	Planner was not directly involved in planning process (see below).
12. Develop weighted cost evaluation for funding of existing programs and operations	Yes	No	Abandoned	---	---	---	Special projects officer has primary fiscal responsibility -- little coordination with planning officer.

Table 1 (cont)

PROJECT ACTIVITY OVERVIEW FOR DOWNERS GROVE

PROJECT ACTIVITIES	PLANNED ACTIVITY		DEGREE OF IMPLEMENTATION	ACTIVITY RELATED TO COMMON OBJECTIVES	TENURE OF ACTIVITY	SCOPE OF EFFORT	COMMENTS
	Detailed In Grant Application	Initiated After Project Started					
13. Investigate alternate budget methods such as systems or program budgeting	Yes	No	Abandoned.	---	---	---	See above.
14. Target Incidence and Selective Enforcement Project	No	Yes	Completed	Objectives 1-5 and 7	On-Going	Major	Involves the continued data input on crime analysis to operational supervisors.
15. Modifications of Juvenile Report	No	Yes	Completed	Objective 1	One-Time	Minor	Designed new report provided to Juvenile Court System.
16. Updating operating procedures and procedures	No	Yes	Completed	Objective 6	One-Time	Major	Updated procedures manual was a major project of grant activities.
17. Produce data to develop STEP Unit	No	Yes	Discontinued	Objectives 3, 5, & 7	One-Time	Significant	Formal STEP Unit never materialized.
18. Supply operational data for new STEP Unit	No	Yes	Completed	Objectives 1 and 3	On-Going	Major	Although formal STEP Unit was never developed, planner provided traffic analysis to operational supervisors for selective enforcement purposes.
19. Develop security ordinance	No	Yes	Partially Completed	Objective 8	One-Time	Significant	Ordinance written by planner -- being reviewed by City -- not yet implemented.
20. Feasibility study on use of motorcycles	No	Yes	Completed	Objective 5	One-Time	Significant	See Project Activity 3
21. Job inventory for parking enforcement personnel	No	Yes	Completed	Objective 3	One-Time	Minor	See Project Activity 2
22. Study squad car needs	No	Yes	Completed	Objective 5	One-Time	Minor	See Project Activity 3
23. Crossing Guard study	No	Yes	Completed	Objective 3	One-Time	Minor	See Project Activity 2
24. Community service officer evaluation	No	Yes	Completed	Objective 3	One-Time	Minor	See Project Activity 2
25. Study utilization of public service employees	No	Yes	Completed	Objective 3	One-Time	Minor	See Project Activity 2

only a minor effort to implement. It is interesting to note that only one of the last twelve can be classified as an "on-going" activity. All the rest were one-time efforts to attack a current issue or problem confronting the administration or operation of the Department.

The nature of the activities and the problems encountered can be illustrated by discussing two specific activities from Table 1. These are (1) Target Incidence and Selective Enforcement Project and (2) Modification of the Juvenile Report.

The objective of the Target Incidence and Selective Enforcement Project was to "initiate a selective enforcement program on target crime which constitute a high proportion of total crime." Vandalism and burglary were the target crimes selected. The specific activities were to:

- Subdivide the city into grids to ascertain patterns of crime by type and location.
- Collect and analyze crime data by grid to isolate high crime areas.
- Distribute the results to patrol commanders.

One of the first problems was that a change in the dispatch system was needed in order to computerize the records. Program errors were also slowing the transition. These problems were not completely resolved at the time of the evaluation. As an alternative, data was manually collected and analyzed.

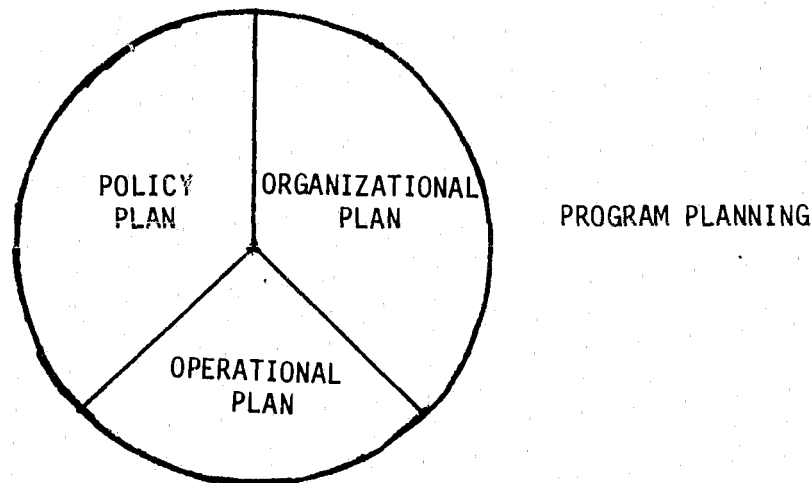
A second problem area was the inability to accurately pinpoint the time of occurrence of the target crimes. This problem is a standard one when analyzing property crimes. However, the planning officer was able to prepare a report on the two target crimes using data from May 1976.

Redesigning the juvenile report was a minor but important activity for the planning officer. The report had not been changed in many years even though there were frequent complaints on the time required to complete the report. The planning officer recognized the problem and devoted some time to modify

the report format. The new form was eventually implemented and has substantially reduced the filing times for juvenile cases. Had the grant project not been in existence, it is doubtful that this improvement would have been made.

Summary Comments

If we were to diagram police planning relationships, one of the easiest ways is to construct a simple pie diagram as shown below:



The various pieces of the pie can be labeled by one of several definitions ascribed to police planning, e.g., operational, organizational, or procedural. Regardless of what we call the pieces of the planning pie, there should be some integrating force behind the total planning effort. This last aspect or phase of planning is usually referred to as program planning or a "plan for planning." The plan spells out what the department expects to accomplish.

In summary, the Downers Grove project operated as a series of short term operational plans with no overall "plan for planning." After more than a year of operation, no long term planning program had evolved.

A related problem was that there were other planning efforts within the Department of which the planning officer had only limited knowledge. These included a Management by Objectives effort, some planned personnel programs and some budgetary efforts. The fact that the planning officer had limited knowledge of the activities is another reflection of fragmented planning.

These comments were contained in the working paper on Downers Grove which was reviewed by the Chief and planning Lieutenant. Chief Hess responded as follows:

The context of the report suggests that a Police Department of our size should orient its Planning Unit toward centralized and long range efforts. I disagree with that position in our case and I believe my reasoning would be valid for most medium sized departments within a metropolitan region. A number of federal, state, and regional agencies provide a host of statistical information and projects. Our own Village government provides very accurate financial planning and projection which is available to use. It simply appears redundant to duplicate those efforts and is far more productive for us to build upon that data and concentrate primarily upon operational planning. I do, however, agree with the report that our internal budgeting and planning should be combined because of the close relationship and we plan to make that change in the future.

Chief Hess' argument certainly has validity in that it is useless to duplicate efforts. However, there may have been a misunderstanding on what is meant by centralized or long range efforts. What we are addressing, as stated before, is the need for a planned program to carry out the various functions of planning.

Regardless of whether there really is a program for planning in the Downers Grove Police Department, a review of the number of projects carried to completion by the planner attests to the amount of effort applied to the planning function. Many of the activities could be considered routine or minor; many, on the other hand, were significant undertakings which have favorably impacted major functions of the department. As will be discussed in a later chapter of this report, the change process in the criminal justice sector is not a rapid one. Downers Grove has accomplished effective productive change, some of which has been completed with great speed in a one year grant period.

As a result of the planning activities and newly instituted information system, we believe that Downers Grove has significantly improved its capability to address problem areas. ILEC can, therefore, consider this to have been a successfully funded project.

C. ZION

Introduction

Grant number 1982 was awarded to the Zion Police Department to establish an "Administrative/Operational Planning and Research Unit." Funding was provided from the 1975, 10h funding category. The total cost of the grant was \$32,823. The funding period was for one year initially, April 1976 through March 1977, but was extended through April, 1977. The grant provided funding for one Lieutenant, who was assigned as the Planner/Analyst, and one secretary.

Project Activities

Table 2 provides an overview of the various activities of the Zion Planning Unit. In actuality, the twelve project activities listed in the table are all sub-components of the following three main projects:

1. Develop and implement a team policing concept
 - A. Conduct a workload study.
 - B. Redefine beat patrol areas.
 - C. Study and implement a five/four scheduling concept.
 - D. Evaluate and reorganize the table of organization.
 - E. Reassign investigators as patrol supervisors to facilitate the five/four schedule.
 - F. Increase the generalist police officer concept through increased follow-up investigations by patrol officers.
 - G. Develop target hardening crime reduction programs.
2. Establish crime analysis activities
3. Develop a traffic accident analysis capability to determine needs for traffic patrol.

As can be seen from this list, the bulk of activities undertaken by the planner had to do with implementing the "Basic Squad Team Policing Program." Many of the other project activities listed in Table 2 are related to the team policing activity.

Table 2

PROJECT ACTIVITY OVERVIEW FOR ZION

PROJECT ACTIVITIES	PLANNED ACTIVITY		DEGREE OF IMPLEMENTATION	ACTIVITY RELATED TO COMMON OBJECTIVES	TENURE OF ACTIVITY	SCOPE OF EFFORT	COMMENTS
	Detailed In Grant Application	Initiated After Project Started					
1. Collection and analysis of current crime data	Yes	Yes	Completed	Objectives 1-3	One-Time	Significant	First step in the "Basic Squad Team Policing" concept. Resulted in beat boundary redefinitions.
2. Develop new procedures to improve data collection, storage, and use	Yes	Yes	Completed	Objectives 1-3	One-Time	Minor	Zion utilizes the State-sponsored processing capabilities through LEADS. This activity essentially entailed redesign of the dispatch card for data capture.
3. Implementation and integration of systems recommendations	Yes	Yes	Completed	Objectives 1-3	One-Time	Significant	Relates to change in dispatch card and coordinating data collection with State.
4. Evaluation of implemented plans, designs, and systems	Yes	Yes	Completed	Objectives 1-7	One-Time	Major	Evaluation of basic squad team policies concept.
5. Completion of all Department statistics including cost analysis, surveys on equipment use	Yes	No	Abandoned	Objectives 3 and 5	---	---	There was never any documentation of formal cost analysis or even estimates of anticipated savings under team policing concept.
6. Develop and implement new operational schedules	No	Yes	Completed	Objective 3	One-Time	Major	First product of planning for the basic squad approach was a new schedule based on rotating six squads on a 5 day on - 4 day off schedule.
7. Redefine beat assignments	Yes	Yes	Completed	Objectives 3 and 6	One-Time	Significant	Officers assigned to beats on a permanent basis to increase knowledge of area.
8. Reassign investigative personnel to patrol supervisory assignments	No	Yes	Completed	Objective 3	One-Time	Minor	Investigative staff reduced to provide patrol squad supervisors. Selected patrolmen rotate through major investigations to augment investigations staff.
9. Increase the responsibility of the patrol officer in follow-up investigations	No	Yes	Completed	Objective 3	One-Time	Significant	With the advent of the new beat configurations and basic squad program, the patrol officer was given the follow-up investigation responsibility
10. Conduct a comprehensive workload study	Yes	Yes	Completed	Objectives 3 and 5-7	One-Time	Major	The beat study and crime analysis comprised part of this effort.
11. Traffic accident analysis to determine needs for traffic patrol	No	Yes	Completed	Objectives 1 and 3	Limited	Minor	Routine analysis.
12. Develop target hardening crime reduction program	Yes	Yes	Partially Completed	Objective 8	Limited	Minor	No specific countermeasures planned or coordinated other than team policing concept.

An interesting observation from Table 2 is that under the "tenure of activity column," activities were evaluated as being either a "one-time" effort or a "limited" planning involvement. Many of the one-time efforts contributed to the team policing program. What this means is that the Department used the grant to institute a major program change in the Department, but that the formal planning process was not institutionalized.

Description of Team Policing Activities and Problems

With the Zion project we have an example of a planning grant being devoted to one major project. The activities and problems within that project are interesting to study from the planning perspective. The initial step was the collection and analysis of crime data in order to redefine beat boundaries. This activity was a one-time effort. Our criticism of it is that no machinery was established whereby crime analysis could occur on a routine basis.

A related activity was the redesign of the dispatch card. The dispatch card for police captures all pertinent data needed for complete analysis including unit assigned, time dispatched, time completed, type of call and beat. Improvement in the dispatch card facilitated the data capturing process. Once again, however, the analysis capability was not established on a routine basis.

A key reason the analysis capability was never developed was the other responsibilities of the planning officer. The planner was actually the Operations Lieutenant and the department's organization chart never showed a planning position. After the initial planning effort, there was never time for routine analysis because of the other responsibilities of the Operations Lieutenant.

One of the first products of the planning effort was a new operational schedule based on rotating six squads on a five day on/four day off schedule. While there were some drawbacks to the schedule, it was a definite improvement for the department. One interesting feature of the schedule was that all squads reported for duty every tenth day. Training programs were scheduled for this day to take advantage of the overlap.

Another interesting scheduling feature was implemented under the Team Policing Project. Four of the six investigators were transferred to become squad supervisors. To fill the void thus created for major case investigation, two patrol officers rotated through the Detective Unit every eight months. The officers were selected based on their performance in both patrol and follow-up investigations in their respective beats. The overall effect was to provide increased investigative hours for major cases while also providing a career development opportunity for officers.

Finally, a major operational change was that officers were assigned to beats on a permanent basis. While the new beats represented a certain confinement for the officers over what they had been used to previously, the intended purpose was to increase the officers knowledge of activities within the beat while at the same time developing a broader responsibility for the patrol officers in follow-up investigations. Some of these concepts were documented by Departmental Directive No. 2, "Standard Operating Procedures."

Some key SOPs of Directive No. 2 are provided below for information purposes:

- 2.2 Preferably eating time and breaks will be taken within the beat area . . .
- 2.7 Officers are to develop information and perform follow-up investigations within their beat areas, particularly on cases they initiated. Cases and working copies will be provided.
- 2.8 Officers are to talk to citizens, including parking their car and taking a radio with them, to develop better community relations if activities, investigation, and the Officer in Charge of their shift permits.
- 4.3 Cars will remain in their beat areas unless requested to cover as outlined above, or permission is granted by the Officer in Charge of the shift to leave their beat area.
- 5.11 Communication personnel are to assign calls to vehicles by their beats and will stack "not in progress" calls, informing the caller as to the approximate waiting time if possible to allow beat cars to do a complete and proper report which they can follow-up on in their beat area. The Officer in Charge of the shift is to be advised of a significant amount of calls stacking up so he may take appropriate action.

Summary Comments

The overall assessment of the Zion project is as follows:

- The grant was successful in its main activities. To say, however, that the planning process has become institutionalized within the Department would be inaccurate.
- The grant provided the Department with an opportunity to concentrate on activities that otherwise would have stretched over a long period of time.
- The grant itself has had little impact in improving the overall planning capabilities of the Department. For example, the Lieutenant who acted as the planner during the course of the grant is now listed in the organizational chart as the Operations Lieutenant. The responsibilities of the Lieutenant at present appear to be what they were before the grant.
- Based on our observations of the present responsibilities of the planner, it appears that a full-time planner is not warranted.

There is no doubt that what has been accomplished as the result of the planning grant would have eventually been accomplished without grant assistance. The grant acted as a catalyst and allowed the team policing concept to be implemented sooner than it otherwise would have been.

In summary, then, it can be stated that this project has been successful in that the team policing project has been successful. The team policing program is a creditable operation and has increased the efficiency of the department in a directly measurable way through the reduction in crime, and indirectly through increased police/citizen cooperation. Again, however, there is little evidence to indicate that the process or procedure for planning has improved.

D. CAHOKIA

Introduction

The grant application to implement crime analysis capabilities in the Cahokia Police Department was submitted to the Southwestern Illinois Law Enforcement Commission on March 9, 1977. The Commission reviewed and approved the application on March 16, 1977. The original application was for a total grant amount of \$17,931. The application was reviewed by ILEC's Grants Committee at its June 17, 1977, meeting at which time the application was approved but with reduced funding. The final total grant amounted to \$16,732 with ILEC's share being \$15,896. The grant was funded under project area C4M, Offense-Directed Resource Planning and Utilization.

At the time of the on-site review by the evaluation team, the project had been operational for only six months. The evaluation therefore concentrated on the organization of the unit and the seven activities that were underway.

Project Activities

The grant funds one civilian crime analyst. He was previously the department's crime scene technician so he had prior experience with department operations. The analyst attended some seminars when the grant started to become acquainted with crime analysis techniques.

As Table 3 shows, there were seven activities at the time of the evaluation. Six were completed and one was partially completed. One major effort was the McBee system, a keysort card system using small holes drilled around the outside edge of the card. It is listed as partially completed because it had been in operation for only six weeks. Several more months will be required before sufficient data has been collected for the system to be of major benefit.

On-going crime analysis was the other major activity of the analyst. This activity covers all special requests and routine duties of the analyst, some of which are listed separately in Table 3. For example, the tavern call study was precipitated by the many calls for service to the city's taverns between 2 a.m. and 4 a.m. -- a problem caused by late arrivers from

Table 3

PROJECT ACTIVITY OVERVIEW FOR CAHOKIA

PROJECT ACTIVITIES	PLANNED ACTIVITY		DEGREE OF IMPLEMENTATION	ACTIVITY RELATED TO COMMON OBJECTIVES	TENURE OF ACTIVITY	SCOPE OF EFFORT	COMMENTS
	Detailed In Grant Application	Initiated After Project Started					
1. Reformat printouts to facilitate analysis	No	Yes	Completed	Objective 1	One-Time	Minor	Original state report formats were cumbersome to work with. Redesigned to facilitate analysis.
2. Monthly re-cap of calls for service	No	Yes	Completed	Objectives 1-3	On-Going	Significant	Monthly re-cap summarizes calls for service by beat and time.
3. Weekly crime re-cap	No	Yes	Completed	Objectives 1-3	On-Going	Significant	Contains information on offenses, date and time, suspect information, MO, and description of property lost.
4. On-going crime analysis	Yes	Yes	Completed	Objectives 1-3	On-Going	Major	This activity covers all special requests and routine duties of analyst.
5. Workload analysis	No	Yes	Completed	Objective 3	One-Time	Significant	Workload analysis identified inequalities in workload resulting in schedule adjustment.
6. Tavern call study	No	Yes	Completed	Objective 3	One-Time	Minor	Special study on a major local problem. Recommendation of analyst resulted in increased liquor license fee.
7. McBee keysort system	No	Yes	Partially Completed	Objective 1	On-Going	Major	Recently implemented three files: Field Contact, Stolen Property, and MO file.

surrounding areas where the taverns close at 2 a.m. The analyst documented the problem and made recommendations to increase liquor license fees for establishments staying open until 4 a.m. He further documented that the increased fees would provide the salary for one additional officer.

In the opinion of the evaluation team, the main problem in Cahokia is that once the present analytical procedures become routinized, the analyst will not be very busy. In the long range, it is doubtful the department will be able to justify a full-time analyst unless other responsibilities are found. The Cahokia Police Department consists of 21 sworn officers servicing a population of approximately 20,700. It appears to be too small a department to justify a full-time crime analyst.

In the interim report, the evaluation team expressed its concern on the crime analyst not being busy. Chief Justus replied as follows:

It is my belief that this statement is in error. My reasoning is that as projects are routinized as stated, they will flow at a much faster rate, and give the analyst more time to review implemented projects and make adjustments to fit the department's needs. Further, as the Crime Analyst is accepted, his spare time will be consumed by constantly analyzing new techniques to be disseminated, refined, and expanded to become more of an operational tool for the police department.

The evaluation team still maintains that additional responsibilities will be needed. One way of accomplishing this aim is to develop a program plan. The first step would be to formalize, in a very basic outline form, the basic goals for the future growth and development of the department. Included should be the prioritization of these goals. As the growth and development needs become defined, the analyst could be assigned research responsibilities in accordance with the established goals.

Summary Comments

The evaluation in Cahokia has been limited because the project was only six months in existence. We believe that it is a straightforward crime analysis project which is functioning as intended. The analyst provides

the department with very reliable information on the nature of crime in the community.

Our concerns on the future of the analyst were expressed in the previous paragraphs. It is a problem faced not only by Cahokia but also other projects that were evaluated.

E. PROJECT LOCATE

Introduction

Grant number 2004 was awarded to the city of Champaign to develop a crime analysis unit to serve the three jurisdictions of Champaign, Urbana and the University of Illinois. The first grant award was from category 10h utilizing 1975 monies. The term of the award was for a 14 month period (May 1976 through June 1977). The award was ultimately extended through December 31, 1977. The total award was \$86,004, and funded a crime analyst, a planning specialist and a secretary.

Grant number 2400 was awarded to continue Project LOCATE out of 1976 monies (project area 3d). The term of this award was only six months. For the second award, the positions of crime analyst and planner were combined to one position. The secretary was again funded.

The jurisdictions served by Project LOCATE were as follows:

- City of Champaign
 - Full-Time Sworn Officers: 87
 - Population: 63,400
 - Urbana Police Department
 - Full-Time Sworn Officers: 44
 - Population: 38,300
 - University of Illinois
 - Full-Time Sworn Officers: 61
 - Residence Dormitories: 11,100
- Total Sworn Officers - Three Jurisdictions: 194
Total Population of the Three Jurisdictions: 112,800

Project Organization

According to the grant application, Project LOCATE was to have four specific functions:

- General Crime Analysis
- Specific Crime Analysis
- Special Research Projects
- Law Enforcement Planning.

Project LOCATE was viewed as a resource for all three jurisdictions involved. It was not considered as a stand-alone effort but rather as part of a series of projects to upgrade law enforcement in the area. Already in existence, for example, were the METCAD (Metropolitan Crime Analysis Division) and the Police Diversion Project. Other area-wide projects had been proposed. With regard to METCAD, Operation LOCATE was to operate as a liaison between METCAD and various users such as police departments, city administrators, courts, and the criminal justice planning commission.

To oversee projects such as METCAD, Operation LOCATE and the Police Diversion Program, a Police Policy Board was established comprised of (1) the Chief of Police of each department or designated alternate, (2) the mayor, city manager, or other administrative authority from each city, and (3) a non-voting staff member of the East Central Illinois Criminal Justice Commission. There were problems with the management of Operation LOCATE which we will return to later.

It was believed that the Director of Operation LOCATE should be a Crime Analyst with a strong computer background and experience in law enforcement. The Assistant Director was also to have experience in law enforcement planning and research. It was further intended that each of the three involved police departments should designate officers to maintain liaison with Operation LOCATE. These officers were to be the main link between the departments and the project. They were also to be responsible for input to Operation LOCATE analyses.

Project Activities

Table 4 shows the planned and actual activities of Operation LOCATE. It can be seen that the grant application mentioned eighteen different activities, most of which were to be major in scope. Of this group, twelve never received any attention from LOCATE staff. There were a variety of reasons for abandoning these twelve projects including:

- Lack of use of the information by the other departments
- Decision not to establish the crime prevention unit
- Lack of interaction between LOCATE and other groups
- Decision by LOCATE personnel not to devote time to the activity.

Of the planned activities, one of the most successful was the development of weekly and monthly crime reports to the three agencies. The weekly crime re-cap report, for example, provides information on four major crimes as well as data from field contact cards. A different report is distributed each day according to the following schedule:

Monday -- Assault Report
Tuesday -- Burglary Report
Wednesday -- Theft Report
Thursday -- Field Contact Report
Friday -- Vandalism Report.

Each report provides a summary by beat, location, time, and date for all three agencies. A description of all suspects is also provided.

Each month a report is prepared on a specific target crime. The report is distributed to the three agencies and part of it is issued as a press release. The three Chiefs view this report as a significant tool in public education since it discusses tips for crime prevention.

Finally, Operation LOCATE produces special reports based on data from all three jurisdictions. Special reports have been issued on rape, robbery, prowlers, and runaways.

Table 4

PROJECT ACTIVITY OVERVIEW FOR PROJECT LOCATE

PROJECT ACTIVITIES	PLANNED ACTIVITY		DEGREE OF IMPLEMENTATION	ACTIVITY RELATED TO COMMON OBJECTIVES	TENURE OF ACTIVITY	SCOPE OF EFFORT	COMMENTS
	Detailed In Grant Application	Initiated After Project Started					
1. Daily information sheet/hot list wanted offenders	Yes	No	Discontinued	Objective 1	On-Going	Primary	Daily information sheet instigated by original project manager - later replaced by weekly re-cap report.
2. MO files to be developed and ultimately programmed into METCAD	Yes	No	Discontinued	Objectives 1 and 3	One-Time	Significant	MO cards developed but returned to respective Departments upon departure of original project manager - cards not being utilized.
3. Beat realignment based on information provided by LOCATE	Yes	No	Abandoned	Objectives 3 and 7	None	None	Monthly reports have crime breakdown by geo-code, but not beat - a complaint by one Department. A formal beat analysis never conducted.
4. Manpower needs and budget allocation	Yes	No	Abandoned	Objective 4	None	None	No such data has been provided.
5. Work with crime prevention unit to provide input for building codes and other crime prevention measures	Yes	No	Abandoned	Objective 8	None	None	Regional Crime Prevention Unit was never established as planned.
6. Data from LOCATE to identify areas for target hardening	Yes	No	Abandoned	Objective 8	None	None	LOCATE provided target area analysis for Urban High Crime project. Recommendations ignored - no further significant contact.
7. Periodic reports to State's Attorney & the court system on citizen programs	Yes	No	Partially Completed	Objective 1	Limited	Minor	No formal liaison ever established. Monthly press release may be of benefit to these groups.
8. Input into the development of a five year plan for police services	Yes	No	Abandoned	Objectives 1, 3-5	None	None	A formal planning effort never developed from the standpoint of LOCATE.
9. Coordination of multijurisdictional task forces	Yes	No	Abandoned	Objective 3	None	None	Activity never developed.
10. Conduct feasibility of multijurisdictional team policing program	Yes	No	Abandoned	Objective 3	None	None	Dead issue with jurisdictions - No input from LOCATE.
11. Multijurisdictional manpower utilization study	Yes	No	Abandoned	Objective 3	None	None	No input from LOCATE.
12. Development of multijurisdictional crime prevention project	Yes	No	Abandoned	Objective 8	None	None	Planned regional approach to crime prevention never materialized.
13. Development of internal planning capabilities for each Department	Yes	No	Abandoned	Objectives 2-6	None	None	No input from LOCATE.
14. Evaluation of METCAD implementation	Yes	No	Partially Completed	Objective 1	One-Time	Significant	LOCATE provided geo-coding support and a cost study only.
15. Increased coordination with other agencies within Champaign County and Vermilion County	Yes	No	Partially Completed	Objective 1	Limited	Minor	Rantoul and Champaign County have received telecopiers - little coordination beyond that.

Tabl: 4 (cont)

PROJECT ACTIVITY OVERVIEW FOR PROJECT LOCATE

PROJECT ACTIVITIES	PLANNED ACTIVITY		DEGREE OF IMPLEMENTATION	ACTIVITY RELATED TO COMMON OBJECTIVES	TENURE OF ACTIVITY	SCOPE OF EFFORT	COMMENTS
	Detailed In Grant Application	Initiated After Project Started					
16. MEG Unit feasibility study	Yes	No	Abandoned	Objective 3	None	None	No input from LOCATE.
17. Evaluation of GBF/DIME file	Yes	No	Completed	Objective 1	One-Time	Minor	LOCATE reviewed DIME for possible basis of METCAD geocode system. Determined that DIME contained too many errors.
18. Development of vertical planning system	Yes	No	Abandoned	Objectives 3-5	None	None	Use of LOCATE as a planning resource has been non-existent.
19. Special information bulletin reports	No	Yes	Completed	Objective 1	On-Going	Significant	LOCATE distributes pertinent information on certain crimes to all three Departments from offense reports of any of the three.
20. Research in bike thefts	No	Yes	Completed	Objectives 1 and 3	On-Going	Significant	
21. Establish Field Contact card files	No	Yes	Completed	Objective 1	On-Going	Primary	This McBee Keysort file is one of the major products of LOCATE.
22. Study reporting system of the three Departments	No	Yes	Completed	Objective 1	One-Time	Major	LOCATE studied all elements of report forms from the three agencies - reduced all to one report. Achievement lauded by Chiefs.
23. Weekly crime re-cap reports	No	Yes	Completed	Objective 1	On-Going	Significant	Replaced daily re-cap reports.
24. Telecopier service installed and functioning in three Departments	No	Yes	Completed	Objective 1	One-Time	Minor	Machine installed. Do not appear to affect communication in a positive manner.
25. Research study on calls for service	No	Yes	Completed	Objective 3	One-Time	Minor	Conducted under auspices of Urban High Crime in coordination with University of Illinois. LOCATE not directly involved.
26. Geocoding and coordination with METCAD	Yes	Yes	Completed	Objective 1	On-Going	Major	LOCATE developed geocode system. Hired college students to perform actual coding.
27. Stolen property file developed	No	Yes	Completed	Objective 1	On-Going	Major	A McBee Keysort system. A major achievement of LOCATE in the eyes of the police.
28. Develop crime prevention cards for Urban High Crime program	No	Yes	Discontinued	Objectives 1 and 8	One-Time	Minor	McBee cards were developed but never utilized to any significant extent by Urban High Crime.
29. Coordination with and evaluation of Urban High Crime program	Yes	No	Discontinued	Objective 8	Limited	Minor	LOCATE conducted target area analysis for Urban High Crime. Results were not used - no further coordination.

One problem in some of the planned activities was that the analysis was developed in map form by geocode without beat summaries. The departments were forced to devote their own resources to develop the beat analysis.

As stated above, the Crime Prevention Bureau was never formally established. Operation LOCATE did supply information on a target area analysis for the Urban High Crime Project (Activity Number 6), but the recommendations resulting from the analysis were ignored. Operation LOCATE had no further interaction with the project.

Finally, it was planned that Operation LOCATE was to have input into the development of a five year plan for police service. The fact is that the planning within the respective departments is presently being conducted in the same manner as prior to Operation LOCATE. The only contribution of Operation LOCATE has been to promote inter-agency meetings and cooperation.

In Table 4, activities nineteen through twenty-nine were developed during the project. In this group, nine were completed and two were discontinued. One of the most successful activities was the development of the stolen property file. The file is a McBee keysort system which was implemented in early 1977. At the time of the evaluation, it contained 4,000 to 5,000 cards. These cards were developed by the Operation LOCATE staff on all burglary and theft reports. Six to eight requests for property checks were being received each week and the hit rate was approximately five percent. The police administrators interviewed indicated that the file was one of the major achievements of the project.

Another main achievement was the study of the reporting systems in the three agencies. The study initially reduced the number of offense reports to only two -- one for crimes against persons and one for property crimes. These two forms were later reviewed again by Operation LOCATE and it was determined that they could also be combined. Each department now uses the same single offense report forms which makes analysis and communications between departments much easier.

Summary Comments

The initial grant application for LOCATE presented a well planned organizational schematic of a planning/analysis unit. The planned organization had several built-in factors to insure adequate input, output, and use of both information and resources. Unfortunately, the planned organization was never fully implemented, a factor which may have contributed to some of the supervisory problems experienced by the project.

The first project manager was selected through response to a national advertisement for the position. During his one year tenure as manager of the project, many significant projects were initiated and completed. However, it is apparent that he alienated police personnel within all three departments. The three Lieutenants comprising the policy board all reported that he was difficult to supervise and that he would often begin working on activities far removed from the central function of crime analysis. His personality was described as abrasive toward the officers. This created problems since the project relied heavily on officers for information.

One Lieutenant interviewed by PMS explained that the original project manager had many good ideas at the beginning, but later there was a feeling between all these departments that they were not getting what they thought should be produced from crime analysis.

This brings up a very fundamental aspect of a consolidated effort. Without exception, each Chief and Lieutenant interviewed by PMS was careful to state that the project manager was not totally to blame for the "mismanagement" of the project. They all admitted that the project manager's role was probably not sufficiently well defined by them at the start of the project. The general consensus of all interviewees was that a large part of the problem with the project was that the departments themselves did not know what to expect from a competent crime analysis unit. One Chief stated that he thought the departments were getting out of crime analysis what they put into it. But because this is a learning experience it was not known at the time whether they were putting everything they should into it.

By the end of the first year, the analyst was asked to resign. His resignation was submitted in July 1977. In September 1977, the secretary also resigned. The planner now doubles as both project manager and crime analyst and a new secretary has been hired.

A second phase of funding was applied for and approved for a six month period or through the end of May 1978. A third phase of funding has now been applied for which will continue the grant through the end of December 1978, by which time, the LOCATE functions will be completely merged with METCAD. It is currently planned that the third phase funding will cover salary costs for the planner/analyst through July 31, 1978. As of that date, all maintenance functions and responsibilities of LOCATE will be relegated to the present LOCATE secretary, who will then report to the METCAD director. As of this writing, a METCAD Director has not been formally hired.

In summary, Operation LOCATE has not evolved into the "model" crime analysis unit that it was intended to become. It provides two main on-going services:

- Provides summary data on significant crimes and field contacts across three jurisdictions.
- Maintains field contact and stolen property files which are not being maintained by the respective police departments.

It is anticipated that only the latter will be maintained by the project secretary once the planner/analyst position is abolished after July. It does not appear that crime analysis will be a function of the unit. Rather, the unit will become a reservoir for the keysort cards.

We do not, however, want to overlook some specific successes of the project. Speaking of the various methods and files maintained by the project the second phase application stated:

These three methods have resulted in the arrest of criminals and the solution of a number of major crimes. For example, a person who had been stopped by a number of officers, in the same area, was eventually found to have committed a number of burglaries. In another case, a number of young women were being accosted and harassed on the streets, and because of one field contact card, an individual was identified and arrested as the perpetrator. In the last case, an armed

robbery occurred and a partial description of the vehicle was obtained. The cards were checked, and from a partial description, a possible suspect vehicle was found. The street officers found the vehicle and the armed robber was apprehended at the address provided on the card. In the past, none of these would have been solved as readily, simply because the information was not at the fingertips of the street officers.

From the interviews of the three Chiefs, it is also evident that inter-agency cooperation is a primary success of the project. An example stated by one of the three chiefs illustrates the point. The Chief explained that at the time Operation LOCATE was conceived he was only a captain on the department and, based on historical jealousies, he was opposed to sharing confidential and sensitive information on crimes and suspects with competitive jurisdictions. However, since he has become Chief and has seen the successes of the cooperative exchange of information, he has pushed for other exchanges such as temporary inter-agency transfers for training purposes. Thus, while the actual services and products of Operation LOCATE may not be as substantial as they might have been, the project has provided a viable and very much needed learning experience for the three departments. The experience will undoubtedly lead to greater cooperation and a more efficient delivery of law enforcement services to the citizens of the region.

In the final analysis, it can be stated that Project LOCATE has had measurable success as well as some disappointing results. At present, the single greatest standard of measurement will be its survivability as a service in the coming years as a function of METCAD.

F. KANE COUNTY

Introduction

Grant number 1980 was awarded to the Kane County Sheriff's Department from 1975 funding in project area 10h. The total project budget amounted to \$24,812 and supported a Planning Research specialist and a secretary. The term of this award was from December 1, 1975, through November 30, 1976, with an extension through January 31, 1977. The second year funding (grant 2440) was obtained from project area 3d and was from February 1, 1977, through January 31, 1978. Kane County decided against applying for third year funding due to budget restrictions and personnel reassignments.

During the grant funding period, two planning analysts were employed, one for each year of the grant. The first analyst assigned to the project had both experience and education within the criminal justice system. He was extremely capable and initiated most of the projects engaged in by the Unit. This analyst received a better job offer within a neighboring jurisdiction and left employment with Kane County at the end of July 1977.

The second analyst had a background in public broadcasting with only "associations" with the criminal justice community through his activity as an "investigative reporter." He began his employment with the Kane County Sheriff's Department on August 15, 1977. Much of his time was spent in a learning capacity and in maintaining the projects initiated by the previous analyst. The second analyst resigned in April 1978. The Department did not have anyone assigned to the planning position at the time this evaluation report was completed.

Project Activities

Table 5 gives the 21 different activities performed during the course of the grant project. All but three were completed which is an indication of how busy the analyst was during the grant period. It should be noted that 19 of the activities were one-time efforts. This is a reflection of the

Table 5

PROJECT ACTIVITY OVERVIEW FOR KANE COUNTY

PROJECT ACTIVITIES	PLANNED ACTIVITY		DEGREE OF IMPLEMENTATION	ACTIVITY RELATED TO COMMON OBJECTIVES	TENURE OF ACTIVITY	SCOPE OF EFFORT	COMMENTS
	Detailed In Grant Application	Initiated After Project Started					
1. Patrol allocation and distribution study	Yes	Yes	Completed	Objectives 1-3 and 6	One-Time	Major	At the time, the Department had no automated reports. This manual tabulation of reports paved the way for several later studies.
2. Time response study	Yes	Yes	Completed	Objectives 1-3 and 6	One-Time	Significant	Study conducted as a spinoff from above - documented for first time average delay and response times.
3. Back-up call study	Yes	Yes	Completed	Objectives 1-3 and 6	One-Time	Significant	Determined the areas and times where back-up calls were greatest.
4. Officer's workload study	Yes	Yes	Completed	Objectives 1-3 and 6	One-Time	Major	Through the Officer's Activity Reports, evaluated workload of each patrolman -- served as forerunner of computerized patrol activity report.
5. Communications study	Yes	Yes	Completed	Objectives 1-3 and 6	One-Time	Significant	Studied physical and operational aspects of communications -- new equipment and report revision resulted.
6. SOP revision	No	Yes	Completed	Objectives 3 and 6	One-Time	Major	A sergeant worked this task for some time previous to grant. Analyst assisted in completion.
7. Design new patrol areas	Yes	Yes	Completed	Objectives 1, 3, 6, & 7	One-Time	Significant	As a result of items 1 through 5, patrol areas and schedules were designed to deal with crime patterns.
8. Computerized patrol activity report	Yes	Yes	Completed	Objectives 1-4 and 6	One-Time	Significant	The Sheriff's statistical tables (SST's) are a culmination of several previous efforts and provide good management information.
9. Development of a geocoding system	Yes	Yes	Completed	Objectives 1-3 and 6	On-Going	Major	Developed a grid system (patrol incident areas) for basic data purposes.
10. Communications SOP and training	Yes	Yes	Completed	Objectives 3 and 5	One-Time	Major	In order to implement the patrol activity report, guidelines were developed and training conducted for communications.
11. Records Division study	Yes	Yes	Completed	Objectives 3 and 5	One-Time	Major	This study determined the inadequacies of the records system. Many spinoff efforts resulted, e.g., report forms revisions, microfilming, etc.
12. 911 research	Yes	Yes	Partially Completed	Objectives 1 and 3	One-Time	Significant	Initial research only - actual 911 is not yet implemented.
13. Analysis of Investigation Division	Yes	Yes	Completed	Objectives 1 and 3	One-Time	Significant	Paperwork charted - problem areas defined. Recommendations made, but never implemented.

Table 5 (cont)

PROJECT ACTIVITY OVERVIEW FOR KANE COUNTY

PROJECT ACTIVITIES	PLANNED ACTIVITY		DEGREE OF IMPLEMENTATION	ACTIVITY RELATED TO COMMON OBJECTIVES	TENURE OF ACTIVITY	SCOPE OF EFFORT	COMMENTS
	Detailed In Grant Application	Initiated After Project Started					
14. Criminal justice needs study	No	Yes	Partially Completed	Objectives 1-3	Limited	Significant	Analyst was appointed a member of a commission to determine the needs of an integrated criminal justice computer system.
15. Dispatching for fire and ambulance districts	No	Yes	Completed	Objective 3	One-Time	Significant	Four fire districts were included in Sheriff's dispatching. Planning included telephone tie lines and other equipment needed.
16. Develop Affirmative Action - Equal Opportunity Plan	Yes	Yes	Completed	Objectives 3 and 7	One-Time	Major	Research the laws governing EEO. Research resulted in Affirmative Action Plan that was praised by the State.
17. Dissemination of memorandums and regulations governing job performance and procedures	Yes	Yes	Completed	Objective 6	One-Time	Minor	Conducted in conjunction with Department-wide study of rules and regulations.
18. Personnel evaluation system	Yes	Yes	Partially Completed	Objective 7	One-Time	Significant	System reviewed and recommendations submitted.
19. Installation of fingerprint comparator terminal	No	Yes	Completed	Objective 1	One-Time	Minor	Installed in the corrections complex. Linked to State Bureau of Identification. Allows 24 hour access.
20. Data processing security program	No	No	Completed	Objective 1	One-Time	Significant	Developed codes for entry and retrieval of sensitive information.
21. SOP's for fire dispatch	No	No	Completed	Objective 3	One-Time	Minor	

fact that many studies were needed to improve department operations. Most of the studies were mentioned in the grant application indicating that the many needs had been recognized before the project started.

One of the main activities in the grant project was the Patrol Allocation and Distribution Study which was initially aimed at determining the impact of calls for service, criminal offenses, and traffic accidents by time of day, day of week, and geographic area. The study quickly evolved into an analysis of how the patrol division functioned. The study thus became comprised of several smaller studies:

- Time Response Study
- Time Response Back-up Call Study
- Officer's Workload Study
- Communication System Study.

The Time Response Study was conducted to determine the average delay and response times for calls. In conducting this study, incident cards from the radio room were used to produce the statistics. The incident card includes the type of call, location, time received at the communications room, time unit was dispatched, and time the unit completed the call. The time information is used to calculate average delay and response times. Four months of data were collected. A similar study was conducted for back-up calls to determine how many requests for assistance were received.

The officer's workload study was conducted by using the Daily Activity Report completed by each officer during a tour of duty. These logs were sent to the Kane County Data Processing Department and a summary report was produced. While these reports were not considered completely accurate, they did provide some indication of each officer's activities. The Communication System Study was conducted because of the importance of communications to patrol operations. Any changes in a patrol plan must be coordinated with the Communications Unit.

This discussion illustrates the various aspects that can develop when a major study is conducted. Studying a patrol operation, for example, means studying several related components. An analyst must be sure that any recommendation will not adversely affect other operations.

Major studies can also be time-consuming. Three months of concentrated effort were required for the Patrol Allocation and Distribution Study. The study involved several key persons: the Sheriff, the Director of Operations, personnel from the county data processing unit, and communications personnel. During the course of the study, the analyst maintained a log on key meetings and decision points. This log is instructive because it illustrates the role of the analyst and also shows how many activities are needed to complete such a study. The following is a list of tasks and hours of effort for the various tasks in the four studies under the Patrol Allocation and Distribution Study:

<u>Task</u>	<u>Date Completed</u>	<u>Professional Hours of Effort</u>
1. Ideas and plans were formulated on how to conduct and carry out the Patrol Allocation and Distribution Study	December 8, 1975	30
2. Survey of Aurora, Illinois Police Department method of recording patrol information	December 9, 1975	12
3. Meeting with Kane County Data Processing Unit	December 29, 1975	8
4. Meeting with Data Processing Unit to discuss Officer's Daily Activity Worksheet	January 13, 1976	51
5. Survey to document system of recording patrol information	January 15, 1976	28
6. Problems within the communications system identified. Recommendations made.	January 30, 1976	25

<u>Task</u>	<u>Date Completed</u>	<u>Professional Hours of Effort</u>
7. Time Response Study completed	February 6, 1976	60
8. New incident cards for the communciations system implemented	February 23, 1976	28
9. Recommendations made on use of communication room's time clock	March 5, 1976	10
10. Time Response for back-up calls completed	March 12, 1976	29
11. Communications System Study completed	March 19, 1976	60
12. Officer's Workload Study completed	March 22, 1976	180
13. New patrol areas presented to the Director of Operations for review	March 22, 1976	--

There was a total of 521 hours of professional effort devoted to the overall study over a three month time period. The new patrol areas were accepted. As a result of the new incident form, call-for-service activity could be collected more accurately, thus allowing more detailed evaluation of patrol operations.

A second key study was a 911 Communications feasibility. This study was initiated after the Illinois state legislature passed a bill which mandated that the three digit emergency number, 911, be established by all public safety agencies in the state. By January 31, 1980, tentative plans for 911 must be submitted to the Illinois Commerce Commission and final plans by January 31, 1982. The Planning and Research Unit was directed to study the emergency number implementation in rural and unincorporated Kane County.

The communications study involved a considerable amount of staff time. Meetings were held with the Illinois Bell Telephone Company, the Elgin Emergency Medical Services Council, the Radio Communications installers, the Elburn Fire Commissioner, and representatives from several surrounding communities.

When the evaluation was conducted, the 911 emergency number had not been implemented. However, several surrounding jurisdictions had switched to the communications system of the Sheriff's Department. Members of the surrounding jurisdictions were also becoming more involved with the planning of a 911 emergency number. In summary, the various agencies were working toward the complete implementation.

Summary Comments

The Planning and Research Unit has conducted several major studies for the Sheriff's Department. The evaluation team was impressed with the thoroughness of the research and the quality of the reports. Some of the reports were implemented; others were not. In each case, however, the unit personnel produced a final report of high quality.

Problems with the Kane County project resulted from personnel rather than project efforts. Once again, there was no attempt to institute the planning process within the department. The selection of the second analyst was particularly disappointing in this regard. The second analyst had no previous criminal justice experience. He had a considerable amount to learn before becoming an effective planner in the department. In addition, he was assigned many tasks not related to planning.

As discussed earlier, the second analyst resigned in April 1978. The position had not been filled at the time of the evaluation. In summary, the grant provided an opportunity for the Department to conduct several needed studies but there was never a serious attempt to make the unit permanent in the organization. No "plan for planning" was developed and it now appears doubtful that any such plan ever will be.

G. DANVILLE/VERMILION COUNTY

Introduction

Grant number 2003 was a cooperative grant between the city of Danville and Vermilion County intended to establish a joint crime analysis team (CAT) program for the two jurisdictions. The grant was for a 14 month period from May 1976 through June 1977. The award was \$72,638 and funded a crime analyst, a planning specialist, and a secretary (plus one cadet and two interns on a part-time basis).

Grant number 2773 is the extension of the above grant, the term of award of which was from July 1977 through June 1978. The total grant cost during the second year was \$16,020.

Organization and Personnel Staffing

Prior to beginning our review of project activities, it is beneficial to review the status of the CAT unit within the organizational structure of the Danville Police Department and the manner in which the unit provides services to both the Police and Sheriff's Departments. Figure 1 shows the organizational structure of the Danville Police Department at the time of the evaluation. It should be pointed out that while the CAT unit was designed to provide services to both the Police and the Sheriff on an equal basis, the chain of command and physical location of the unit altered this concept. The unit is physically housed on the Police side of the Public Safety Building. The formal chain of command as shown by Figure 1 indicates that the crime analyst reported to the Lieutenant in Charge of the Records and Information Division, who in turn reported to the Danville City Chief of Police. Since CAT unit personnel are city rather than county employees, the routine administration of the grant was through the Danville Police Department.

A review of project activities shows that the Police Department played a far more active role than the Sheriff's Department in terms of grant administration, assignment of personnel, and the operations of the unit.

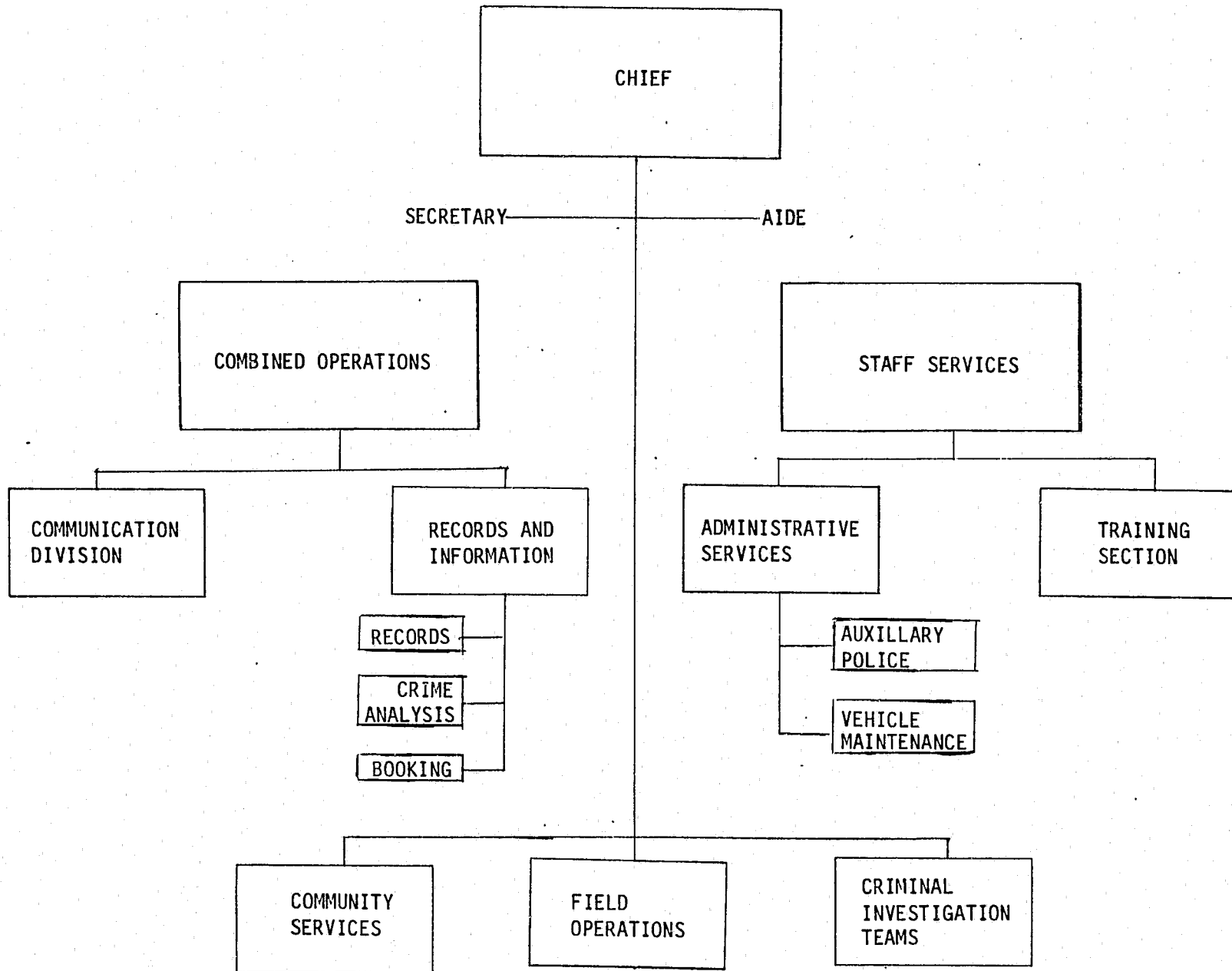


FIGURE 1

ORGANIZATION OF DANVILLE POLICE DEPARTMENT

The crime analyst was formally assigned in September 1976 even though the grant officially began in May 1976. Secretarial/clerical help was not made available until November 1976. The planner was hired under a one year contract in January 1977. The planner became involved in a number of activities, mostly dealing with grant development and very little with actual planning. By September 1977, the Director of Staff Services left the Danville Police Department and the CAT planner replaced him, if not formally by title, at least in the assumption of duties. The "CAT Planner" remained the Director of Staff Services for the remainder of his stay with the Department (see Figure 1 for the organizational position of Staff Services). While the CAT planner obviously provided some initial benefits for the funded project, his usefulness in crime analysis planning rapidly diminished in proportion with his increased use as a procurement and budgeting officer.

The original crime analyst left the unit in January 1978 to become a sworn officer in the Danville Police Department. The planner left shortly thereafter at the conclusion of his one year contract. The secretary has been promoted to the position of Crime Analyst Supervisor and she now supervises four CETA clerical employees.

Project Activities

Table 6 provides a summary of activities conducted by the CAT unit. The table shows many crime analysis activities that are standard in other police departments. The Danville/Vermilion County Departments did not have these standard activities prior to the grant application. What the grant brought was an opportunity to start them in a centralized unit.

The evaluation team was impressed with the progress made by the CAT unit. There were numerous activities on-going at the time of the evaluation and the unit appeared to be well established. Some of the main activities were as follows:

Field Contact File. One of the main files maintained is on field contact cards completed by officers. The file is designed as a McBee keysort file, which was an idea borrowed from Project LOCATE. At the time of the evaluation, there were over 2,000 field contact cards in the file. The file was

Table 6

PROJECT ACTIVITY OVERVIEW FOR DANVILLE/VERMILION C.A.T.

PROJECT ACTIVITIES	PLANNED ACTIVITY		DEGREE OF IMPLEMENTATION	ACTIVITY RELATED TO COMMON OBJECTIVES	TENURE OF ACTIVITY	SCOPE OF EFFORT	COMMENTS
	Detailed In Grant Application	Initiated After Project Started					
1. Study manpower allocation for both Departments	Yes	Yes	Partially Completed	Objective 3	One-Time	Significant	A study was conducted only of the Danville Police Department in conjunction with the team police evaluation.
2. Develop a proportional schedule in relation to hourly and daily crime patterns	Yes	No	Partially Completed	Objective 3	One-Time	Significant	Developed for Danville Police Department only. Recommendations never accepted by command staff.
3. Assist in development of combined records system	Yes	No	Completed	Objective 1	Limited	Significant	
4. Study the overall nature of crime problem within the county and 13 other municipal agencies within the county other than Danville.	Yes	No	Abandoned	Objective 3	None	None	Overall, there was only limited involvement or review of county-wide problems - concentration was on Danville.
5. Study feasibility of county-wide contractual police program	Yes	No	Abandoned	Objective 3	None	None	See above comments.
6. Assess potential for developing automated computer systems for the two agencies	Yes	No	Abandoned	Objective 1	None	None	Records section is only now contemplating future automation - no involvement from Planner/Analyst.
7. Hotsheet	No	Yes	Completed	Objective 1	On-Going	Significant	Listing of all stolen vehicles, county-wide distribution.
8. IUCR submission	No	Yes	Discontinued	Objective 1	Limited	Minor	At one point, CAT was responsible for IUCR - now being done by communications staff.
9. Stolen article file	No	Yes	Completed	Objective 1	One-Time	Significant	One of six major files established under McBee Keysort.
10. Nicknames/Alias file	No	Yes	Completed	Objective 1	One-Time	Significant	See above.
11. Active warrants list	No	Yes	Discontinued	Objective 1	On-Going	Major	This report was started but due to the number of errors on warrants, program discontinued. Expect to start again soon.
12. Crime alert bulletin	No	Yes	Completed	Objective 1	On-Going	Significant	Distributed on an as-needed basis to all teams.
13. Spot maps	No	Yes	Completed	Objective 1	On-Going	Significant	Maps contribute little to overall effort.
14. Metro crime re-cap	No	Yes	Completed	Objective 1	On-Going	Significant	This report started in September 1976, published for almost a year then discontinued. New analyst began publication again in March 1978.

Table 6 (cont)

PROJECT ACTIVITY OVERVIEW FOR DANVILLE/VERMILION C.A.T.

PROJECT ACTIVITIES	PLANNED ACTIVITY		DEGREE OF IMPLEMENTATION	ACTIVITY RELATED TO COMMON OBJECTIVES	TENURE OF ACTIVITY	SCOPE OF EFFORT	COMMENTS
	Detailed In Grant Application	Initiated After Project Started					
15. Complaint dispatch card	No	Yes	Completed	Objective 1	One-Time	Minor	Joint effort with Communications and Records. Dispatch card good for data retrieval. All that was previously available was radio log.
16. Monthly, quarterly, and annual reports	No	Yes	Completed	Objective 1	On-Going	Significant	Unit provides excellent monthly and quarterly summary reports.
17. Microfilming	No	Yes	Partially Completed	Objective 1	Limited	Significant	CAT supervised the microfilming of old records. However, grant equipment (microfiche) has been purchased but not used.
18. Victimization study	No	Yes	Completed	Objective 1	Limited	Minor	Instigated by Chief of Police. Contract to University of Illinois to do study. Department said study never used.
19. Work release/manpower screening	No	Yes	Completed	----	Limited	Minor	Conducted by Planner. Had little to do with grant activities.
20. Team policing evaluation	No	Yes	Completed	Objective 3	One-Time	Significant	Crime analyst was assigned to the city's evaluation of the team policing concept. Analyst provided comparative data.
21. Auto theft program	No	Yes	Completed	Objective 3	One-Time	Minor	CAT investigation showed that 90% of auto thefts should have been closed as unfounded or exceptionally cleared.
22. Stolen weapons hot sheet	No	Yes	Completed	Objective 1	On-Going	Significant	Published whenever recoveries or theft reports mandate revision of the list.
23. MO file	No	Yes	Completed	Objective 1	On-Going	Significant	Standard MO information maintained on 3 x 5 cards rather than keysort.
24. Field Contact file	No	Yes	Completed	Objective 1	On-Going	Primary	Another keysort file. This is the main file maintained by CAT and is responsible for much of the success of the unit.
25. Officer status reports	No	Yes	Completed	Objective 1	On-Going	Major	Monthly report of activities by each officer in each team.
26. Squad room status board	No	Yes	Completed	Objective 1	On-Going	Significant	Same type of information as provided in the officer status reports, but consolidated for team comparisons.

developed rather rapidly because CAT staff extracted information from police reports. Combining these entries with the contact cards by officers resulted in 15-20 cards per week into the file. The Chief, however, has now directed that only those cards submitted by officers be coded and that a record be removed after it has been in the file for three months. With this change, the unit received an average of ten cards per week.

A notable success related to the file was the solving of a double homicide in the Champaign area as the result of a field contact card made during a stop in Danville. Requests for information from the file increased significantly after this hit. At the time of the evaluation, requests had declined to an average of three to four requests per week.

The file has been well received by all police departments in the surrounding area. CAT provided each police agency with an initial supply of cards requesting that they start using the system. At the time of the evaluation, however, the Danville Police Department was the major contributor.

Stolen Article File. Another McBee keysort system established by the CAT unit is the stolen article file. It consists of several subfiles:

- Citizen Bands
- Motorcycle Accessories
- Tape Players
- Televisions
- Bicycles
- Miscellaneous
- Cameras
- Stereos/Radios/Musical Equipment/Clocks
- Auto Thefts and License Plates
- Weapons
- Purses and Wallets
- Jewelry
- Checks and Securities
- Tools and Construction Equipment
- Recovered Property File

The file was well maintained and proved beneficial in the recovery of stolen property. While no log has been maintained on the number of recoveries, the evaluation team heard several success stories related to the file. It was one of the most frequently used files.

Hot Sheets. The CAT unit publishes hot sheets on stolen vehicles and stolen weapons. Distribution is made to all agencies in the County. The hot sheet on vehicles includes license numbers, descriptions, and case numbers on all stolen vehicles in the County. It is updated whenever there is another stolen vehicle or a recovered vehicle.

Active Warrants File. An active warrants list was also developed by the CAT unit and distributed to all enforcement officers in the County. Impetus for the report was the many errors found in cancellation of warrants and many lost warrants. The listing was an attempt to provide more accurate information. Unfortunately, the listing was cancelled soon after it started due to administrative problems in obtaining accurate information from the County government.

Squad Room Status Board. Another more recent responsibility of CAT was the establishment of a status board in the Danville Police Department showing the number of felonies reported, misdemeanors reported, clearances by arrest, parking tickets, warning tickets, and field contact cards. The board displays the information for the current month, the previous month, and cumulative totals.

Impact of CAT Activities on the Police and Sheriff's Departments

In an early data collection visit to the Danville CAT unit, the evaluation team interviewed a number of individuals to determine how well CAT had integrated itself into the general department activities, and what impact the unit had on the operational functions of both Departments. The interviews within the Danville Police Department revealed a mixed reaction to the unit. The investigative team and crime prevention unit had the greatest appreciation for CAT services. In the Sheriff's Department, we found that the Sheriff had little knowledge of the unit.

In an effort to document what impact CAT had on the operations of the two Departments, we obtained permission to distribute a questionnaire to the sworn personnel within each Department. The following is a summary of responses:

Sheriff's Department

Thirteen questionnaires were distributed within the Sheriff's office to those officers who would normally have contact with or use of crime analysis (i.e., officers as opposed to jail custodians). Seven questionnaires were returned. The questions and responses are outlined below:

Crime Analysis Unit:

I am familiar with the Unit, where it is located, and have a <u>good</u> idea of the type of information it maintains in its files and the various reports it publishes.	5 RESPONSES
I am familiar with the Unit and have a <u>general</u> idea of the information it maintains and reports it publishes.	1 RESPONSE
I have heard of the Unit and am familiar with reports it produces but am <u>unfamiliar</u> with the Unit's files or the information they contain.	NO RESPONSE
I have heard of the Unit but I am not very familiar with the information maintained in its files or the reports produced by the Unit.	1 RESPONSE
I did not know that a crime analysis team existed and I am not familiar with the information it produces.	NO RESPONSES

If you checked any but the last block above, please also answer the following:

I have made frequent (two or three times per month) requests for special information from the Crime Analysis files.	1 RESPONSE
I occasionally make periodic requests for special information from the files.	2 RESPONSES
I have never submitted a request for special information from the Crime Analysis files.	3 RESPONSES

Listed below are the various reports published by the Crime Analysis Unit. Please check all the reports which you feel are beneficial to increasing the efficiency of your police work:

Active warrant list (6)	Theft from auto report (3)
Stolen weapons list (5)	Crime re-cap bulletin (4)
CB theft report (3)	Crime alert bulletin (4)
Bicycle theft report (3)	Stolen article hotsheet (4)
Stolen vehicle hotsheet (5)	

Please check the statement which best describes your participation in the "Field Contact Card System".

I am familiar with the content and purpose of the Field Contact cards, as established by the Analysis Unit; I agree with the concept and submit contact cards whenever possible. 4 RESPONSES

I am familiar with the intent and purpose of Field Contact cards; however, I disagree with the concept and purpose, therefore, I seldom submit cards. NO RESPONSES

I am not very familiar with the intent and purpose of Field Contact cards, but I do submit them as often as circumstances allow. NO RESPONSES

I am not very familiar with the intent and purpose of Field Contact cards and seldom if ever submit them. 3 RESPONSES

Police Department

There were some seventy questionnaires distributed to members of the Police Department. Only twenty-five responses were returned. When a patrol supervisor was questioned during a final data collection visit to Danville, some doubt was expressed as to whether the questionnaires were actually distributed to the officers of all three patrol teams. However, the questionnaires that were returned provided us with some insight as to the impact of CAT at the operational level. Following are the responses from the Police Department:

Please check the box below which most nearly depicts your knowledge of the Crime Analysis Unit:

I am familiar with the Unit, where it is located, and have a good idea of the type of information it maintains in its files and the various reports it publishes. 20 RESPONSES

I am familiar with the Unit and have a general idea of the information it maintains and reports it publishes. 5 RESPONSES

I have heard of the Unit and am familiar with reports it produces but am unfamiliar with the Unit's files or the information they contain. NO RESPONSES

I have heard of the Unit but I am not very familiar with the information maintained in its files or the reports produced by the Unit. NO RESPONSES

I did not know that a crime analysis team existed and I am not familiar with the information it produces. NO RESPONSES

If you checked any but the last block above, please also answer the following:

- I have made frequent (two or three times per month) requests for special information from the Crime Analysis files. 15 RESPONSES
- I occasionally make periodic requests for special information from the files. 9 RESPONSES
- I have never submitted a request for special information from the Crime Analysis files. NO RESPONSES

Listed below are the various reports published by the Crime Analysis Unit. Please check all the reports which you feel are beneficial to increasing the efficiency of your police work:

- | | |
|------------------------------|------------------------------|
| Active warrant list (26) | Theft from auto report (15) |
| Stolen weapons list (21) | Crime re-cap bulletin (17) |
| CB theft report (18) | Crime alert bulletin (18) |
| Bicycle theft report (16) | Stolen article hotsheet (21) |
| Stolen vehicle hotsheet (25) | |

Please check the statement which best describes your participation in the "Field Contact Card System".

- I am familiar with the content and purpose of the Field Contact cards, as established by the Analysis Unit; I agree with the concept and submit contact cards whenever possible. 22 RESPONSES
- I am familiar with the intent and purpose of Field Contact cards; however, I disagree with the concept and purpose, therefore, I seldom submit cards. 1 RESPONSE
- I am not very familiar with the intent and purpose of Field Contact cards, but I do submit them as often as circumstances allow. NO RESPONSES
- I am not very familiar with the intent and purpose of Field Contact cards and seldom if ever submit them. NO RESPONSES

One respondent wrote in that he was familiar with Field Contact cards, but did not submit them even though he thought it was a good idea.

Summary of Responses

The questionnaires support the conclusion that the services of CAT are more extensively used by the Police Department than by the Sheriff's Department.

The active warrant list, stolen article hotsheet, stolen vehicle hotsheet, and stolen weapons list were considered highly important and used extensively by the officers. The bicycle theft report, theft from auto, crime re-cap, and crime alert bulletin were found to be less important. The following officer comments are provided from the questionnaires:

- The (3) three boxes not checked (theft from auto, crime re-cap, crime alert) are the unnecessary reports. They duplicate the other reports; thus are a waste of time and effort.
- The crime re-cap bulletin is not used in our units as we keep our own.
- If present Daily Log is used properly, crime re-cap bulletin would not be needed.
- Crime re-cap bulletin is a good idea, but the police Daily Log serves the same purpose if it were written correctly with necessary information.

Some of the comments by respondents from both department are as follows:

Sheriff's Department

- I feel that the C. A. Unit should provide other reports on major crimes.

Police Department

- 1. Too much time spent on "STATS"
 2. "STATS" kept are for Danville P. D. - The Sheriff's office receives little support.
 3. Danville P. D. dominates CAT
 4. A "STAT" board kept in Danville Police Dept's squad room is a waste of time, effort, and funds to maintain. The info. on the board is reproduced in print.
 5. CAP should move their office closer to the Records division room to save time walking from one side of the building to the other - also it would help keep the CAP employees in their office more which would make them more easily available for requests.
 6. A more efficient use of employees could be accomplished - those on nights, without supervision spend most of their time sitting in Records "chatting". I'm in Records often and this has been observed on numerous occasions - it is not a casual observation.
- The Danville/Vermilion County Crime Analysis makes every effort to cooperate with the police agencies and always are open for suggestions to improve their usefulness to the departments. They definitely put 100% into their work.

- The active warrant sheets which are updated frequently are an excellent tool. Also the field contact card system is also an excellent tool for the field and investigation officer.
- Crime Analysis is a function needed for a long time with this Department. Too many times property is recovered or could be recovered if the source of the theft could be determined. It is a great investigative tool for all personnel.
- It has been impossible in past years to know what was stolen as there was no file other than looking through reports. It is very handy and helpful to call in when property is found on a search warrant that was not listed and fined if has been stolen. Let them keep up the good work.
- The Crime Analysis Unit, as far as this department is concerned, do an outstanding job and are extremely efficient and beneficial. My being involved in follow-up investigations make me appreciate them even more. Any negative comments you may receive, you can believe will come from guys who don't do anything anyway, and just put in their 8 hours and go home!
- The addition of the Crime Analysis Unit is one of the best additions to the Danville Police Department that has occurred since I joined the Police Department. This Unit provides a very valuable and needed service for us and I hope we are able to keep this unit from now on.
- If used, it works!

Officer Participation in CAT

The last statement, "If used, it works," is a succinct summary that is supported by the following analysis. After going to the officers for their opinion on the CAT unit, we developed a form to document the requests for information. It was maintained for a twelve week period (from March 15 through June 5) and documented the requests for information and results.

Table 7 provides a summary analysis of the data captured on the log. The table shows that the major files maintained by CAT lack use. During the 83 day period, there were only 63 total requests for information or an average of 0.76 requests per day. The field contact and stolen property files were queried most often. The remaining four files were not being used.

TABLE 7
 REQUEST FOR INFORMATION FROM C.A.T. FILES
 (ANALYSIS OF AN 83-DAY PERIOD - 3/15 THROUGH 6/5/78)

FILE	NUMBER OF REQUESTS BY UNIT								TOTAL REQUESTS	LEADS PRODUCED		NUMBER OF HITS		NEGATIVE RESULTS OF FILE SEARCH		SPECIAL REQUESTS/REPORTS PROCESSED
	A Team	B Team	C Team	CIT	Crime Prev.	Other Unit	Sher. Offc.	Out. Agency		#	%	#	%	#	%	
Field Contact Card File	14	3	3	6	1	1	0	2	30	15	50%	6	20%	9	30%	--
Stolen Article Card File	7	0	3	10	3	0	1	3	27	10	37%	4	15%	13	48%	--
Nickname/Alias File	0	2	0	1	0	0	0	1	4	2	50%	0	0	2	50%	--
Method of Operation File	1	0	0	0	0	0	0	1	2	0	0	1	50%	1	50%	--
Suspect by Crime Type File	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--
Scars or Identifying Marks File	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--
TOTAL FILE SEARCHES	22	5	6	17	4	1	1	7	63	27	43%	11	17%	25	40%	
Special Request for Crime Data or Reports	1	0	0	0	1	0	0	0	2	--	--	--	--	--	--	2

The success rate is excellent on inquiries. The 63 inquiries produced 27 (43%) possible leads. The actual hit rate* was 17 percent which is much higher than most automated systems (the National Crime Information Center (NCIC) has a hit ratio of less than one percent). Only 25 (40%) of the searches produced negative results. Table 7 also reveals that the A team (1st team) was the heaviest user of the system with the Criminal Investigations team a close second. Together, they comprised 60 percent of CAT's clientele.

In an effort to determine the primary contributors to the CAT files, we reviewed the monthly officer activity reports produced by CAT for a three month period. Table 8 provides a summary of our analysis. The first observation is that Team A contributed significantly fewer cards to the field contact files than the other two patrol teams. Comparing the two tables, Team B was the heaviest contributor, but it was not the highest user. Part of this paradox can be explained when we understand the shift assignments. Team A is the day shift and Team B is the swing shift. Team A had more opportunities to use the file systems. Conversely, Team A conducted fewer field interrogations simply because of the hours worked.

Table 8 also shows in column four that the average submission of field contact cards by officers was 7.77 cards per month. However, the monthly average submission per officer is greatly skewed. As column five indicates, a high percentage of the cards were submitted by only a few officers. In reviewing the monthly activity reports for the three month period, we found that six officers were submitting from 75 to 80 percent of the total field contact cards.

In summary, many of the files being maintained by the unit are not used operationally. Only a small percentage of the patrol force was making significant contributions to the files. Yet, when the files were used, they have proven to be an excellent aid.

*We defined a hit as the ability to produce the exact information wanted, e.g., any suspicious vehicle entries made on a given vehicle, identification of specific property stolen, etc.

TABLE 8
THREE MONTH ANALYSIS OF PATROL OFFICER PARTICIPATION
IN FIELD CONTACT CARD PROGRAM
(BY TEAM)

1	2	3	4	5	6	7
TEAM	MONTH	NUMBER OF OFFICERS ASSIGNED	AVG. NO. OF SUBMISSIONS BY OFFICER	HIGHEST NO. OF INDIVIDUAL SUBMISSIONS	TOTAL NO. OF OFFICERS MAKING SUBMISNS.	TOTAL SUBMISSIONS
A	February 1978	18	0	0	0	0
	March 1978	20	.35	5	2	7
	April 1978	20	.70	7	3	14
B	February 1978	22	15.95	135	12	351
	March 1978	22	19.23	115	17	423
	April 1978	21	11.38	102	14	239
C	February 1978	17	6.18	29	13	105
	March 1978	16	8.19	78	11	131
	April 1978	16	7.94	56	12	127
TOTAL	---	--	7.77	--	--	1397

The evaluation team believes that the problems defined above can be traced to supervisory personnel and the fact that the first line supervisors were not properly included in the planning and development stages of CAT. They were lacking in their understanding and comprehension of what CAT can do for them. They fail to see the need to encourage officers to support CAT.

Summary Comments

The Danville/Vermilion County project is an example of a project that has made considerable progress but did not develop into a complete crime analysis unit. It can only be studied in relation to what the police departments had prior to the project. There were not crime analysis activities before the project. No crime analysis data was collected, no files were maintained, no analysis was done, and no reports were developed. The grant provided an opportunity to correct this situation.

From Table 6 it is easily seen that most of the activities were development of files, e.g., stolen article file, nickname/alias file, active warrants file, and field contact file. The updating of these files has become the on-going responsibility of the crime analysis unit.

The question to be addressed by the police departments is what the future of the unit will be. Will it become a complete crime analysis unit or will it serve as only a data capturing unit? As it currently stands, it is not a complete crime analysis unit. To make it complete would require more support from the departments for more personnel and more equipment. It would further require support from command personnel to establish it as an important organizational entity.

The unit has demonstrated that it can be useful to both departments. The questionnaire results clearly showed that the unit was being used by many officers and investigators. It also showed that results have been achieved on solving crimes. Future developments will show whether these successes are enough to establish the unit as a permanent part of the departments.

H. LAKE FOREST

Introduction

The Lake Forest Police Department has 36 sworn officers serving a population of 17,000 persons. Grant number 1480 provided \$32,788 to fund the Administrative Support Unit of the Police Department. The grant was obtained from 1974 (project area 5g) funding. The term of the award was from October 15, 1974, through October 14, 1975. The grant funded the position of a systems analyst and a secretary.

Second year funding was obtained under grant number 1990, from 1975 category 10h funding. Including grant extensions for both the first and second grant years, the funding expired on June 30, 1977. The department decided not to seek third year funding.

Project Activities

The plan of the Lake Forest project was to hire a systems analyst to develop a complete management system using the city's System III computer. The analyst was hired in February 1975 and immediately began to develop the management system through a careful review of the current administrative and operational functions of the Department. Table 9 provides an overview of the activities conducted and the reports developed as a foundation to the new management system.

The project's quarterly report for the quarter ending March 31, 1976, described the interrelationship of the various reports in terms of input into the Career and Organization Assessment and Development System (COADS). As explained in the report:

COADS is designed to provide the Administration with information regarding the work performed by all members of the organization. This information will aid the Administration in evaluating the organization, how well it is meeting its stated goals and objectives. By comparison of this information to payroll distribution reports, the Administration can review budget data to aid in their strategy planning in the assignment and utilization of resources to accomplish their stated objectives. This system will tie together all other management data produced from the previous work of this project.

Table 9

PROJECT ACTIVITY OVERVIEW FOR LAKE FOREST

PROJECT ACTIVITIES	PLANNED ACTIVITY		DEGREE OF IMPLEMENTATION	ACTIVITY RELATED TO COMMON OBJECTIVES	TENURE OF ACTIVITY	SCOPE OF EFFORT	COMMENTS
	Detailed In Grant Application	Initiated After Project Started					
1. Analysis of field reporting and the development of a new system	Yes	Yes	Completed	Objectives 1-4	One-Time	Major	Analysis of all reports to determine if they could be used as input documents for automation and to support the major components of the proposed system.
2. Analysis of the budget and accounting system	Yes	Yes	Completed	Objective 4	One-Time	Significant	Existing system revised to determine feasibility and expansion needs for program budgeting.
3. Assess the personnel evaluation system	Yes	Yes	Completed	Objective 7	One-Time	Significant	At project start-up, existing personnel evaluation system was being phased out. The old system was reviewed to determine needs of the new system.
4. New field report procedures	Yes	Yes	Completed	Objective 1	One-Time	Significant	As result of Task 1 above, the following forms were developed: 1. Property form 5. Investigative modules 2. General report form 3. Supplement report 6. Dispatch cards 4. Arrest form
5. Audit control and master development	No	Yes	Completed	Objective 1	On-Going	Major	Developed a series of validation programs to be run as edit checks to make certain all data has been reported and keypunched properly. Validation programs run against case master file. Master file consists of incident, accident, report listings.
● Master Incident listing	No	Yes	Completed	Objective 1	One-Time	Significant	Report on all cases handled as incidents, crime codes, and officers assigned.
● Master case report listing	No	Yes	Completed	Objective 1	One-Time	Significant	Listing of original cases, supplemental investigations, arrest information, and other follow-up data.
● Master accident listing	No	Yes	Completed	Objective 1	One-Time	Significant	Lists accidents per month and ticket numbers issued at an accident.
6. Illinois UCR	No	Yes	Completed	Objective 1	One-Time	Major	IUCR provides management reports that are of little use to the Department. The following three reports were, therefore, developed.
● Offenses and clearances reports	No	Yes	Completed	Objective 1	One-Time	Significant	Report on number of offenses by crime, unfounded reports, dispositions (cleared by arrest or exception).
● Arrests and police dispositions	No	Yes	Completed	Objective 1	One-Time	Significant	Provides information on cases with age, race, and sex of offender and disposition of offender.
● Offenses analysis reports	No	Yes	Completed	Objective 1	One-Time	Significant	Offenses scored by time of occurrence, property stolen/recovered, etc.

Table 9 (cont)

PROJECT ACTIVITY OVERVIEW FOR LAKE FOREST

PROJECT ACTIVITIES	PLANNED ACTIVITY		DEGREE OF IMPLEMENTATION	ACTIVITY RELATED TO COMMON OBJECTIVES	TENURE OF ACTIVITY	SCOPE OF EFFORT	COMMENTS
	Detailed In Grant Application	Initiated After Project Started					
7. Crime analysis and management information reports	No	Yes	Completed	Objective 1	On-Going	Primary	A series of reports were developed for crime analysis and workload information. Reports compare work of individuals to Department standards.
• Property information report	No	Yes	Completed	Objective 1	One-Time	Significant	Provides list of property items reported stolen/recovered intended for disk reference by investigators.
• Workload analysis report	No	Yes	Completed	Objective 1	One-Time	Significant	Reports on total calls by time of day and geographic basis. Totals reflect concentration of workload by hours and location.
• Crime analysis by location report	No	Yes	Completed	Objective 1	One-Time	Significant	Provides information by crime type and location.
• Report/incident analysis by day of week/time of day	No	Yes	Completed	Objective 1	One-Time	Significant	Total calls by day of week and hour of day - allows for manpower deployment on high call days.
• Report time analysis	No	Yes	Completed	Objective 1	One-Time	Significant	Provides information on the time needed to write specific types of reports.
• Crime analysis by class/time	No	Yes	Completed	Objective 1	One-Time	Significant	Provides time analysis in broad time spans when actual time of occurrence is unknown.
• Case status information analysis	No	Yes	Completed	Objective 1	One-Time	Significant	Indicates by percent and raw numbers the cases which have been cleared by arrest exception or unfounded.
8. Career and Organizational Assessment and Development System (COADS)	Yes	Yes	Completed	Objective 1	On-Going	Major	COADS is a phased approach to management involving the establishment of goals and objectives, and measuring total productivity within program areas. Usually this is referred to as MBO, but the Department balks at this designation.
• Job duty analysis	Yes	Yes	Completed	Objective 1	One-Time	Significant	In order to effectively measure productivity, job requirements had to be developed.
• Duty log	Yes	Yes	Completed	Objective 1	One-Time	Significant	A form had to be developed to capture the work being performed.
• Case master file	Yes	Yes	Completed	Objective 1	One-Time	Minor	Part of the individual workload is captured on the before mentioned case master file.

Table 9 (cont)

PROJECT ACTIVITY OVERVIEW FOR LAKE FOREST

PROJECT ACTIVITIES	PLANNED ACTIVITY		DEGREE OF IMPLEMENTATION	ACTIVITY RELATED TO COMMON OBJECTIVES	TENURE OF ACTIVITY	SCOPE OF EFFORT	COMMENTS
	Detailed In Grant Application	Initiated After Project Started					
8. COADS - (cont)							
● Payroll data base	Yes	Yes	Completed	Objective 1	One-Time	Minor	Data from the duty logs also serve as employee time cards.
● Personnel duty/program report	Yes	Yes	Completed	Objective 1	One-Time	Minor	Lists all work performed by each employee for month and year-to-date. Provides check against budgeted program areas.
● Department duty program report	Yes	Yes	Completed	Objective 1	One-Time	Minor	Similar to above - provides a review of Department-wide performance.
● Monthly shift assessment report	Yes	Yes	Completed	Objective 1	One-Time	Minor	Listing of each duty performed and the amount of time spent on that duty compared against total available manhours.
● Monthly personnel comparator assessment report	Yes	Yes	Completed	Objective 1	One-Time	Minor	A comparison of performance by individual measured against the rest of his unit.

The development of COADS continued through June, when it was reported that final programming and keypunching for the system's programs had started. It was also reported that the system was anticipated to be in full operation by the end of July. The report for June was brief and mentioned that since the project was progressing toward full implementation, the project analyst would leave by the end of July 1976. A subsequent project report indicated that a clerk had been hired to work as a replacement to the previous secretary. The clerk assumed the daily management and maintenance of the police systems when the project analyst terminated employment.

The City realized that it would be expensive to maintain the Administrative Analyst once the system became operational. Partially for this reason, the City decided not to seek third year grant funding. The position was then transferred to a function within the municipal government reporting to the Director of Fiscal and Administrative Services, who previously acted as the Project Director for the grant. The position was then classified as an Administrative Aide.

The Administrative Aide has estimated that she spent approximately ten percent of her time maintaining the police management system and working on monthly reports for the Police. In months when quarterly reports were prepared, she estimated that approximately 16 percent of her time was devoted to police reports. The rest was spent on other city matters. In addition to the Administrative Aide, a records clerk within the Police Department spent approximately 15 percent of her time monthly and an estimated 25 percent of her time quarterly in coding input for the computer reports.

Before we review the total management system, it is beneficial to examine specific tasks as described in Table 9. There were eight primary tasks involved in the development of the system. Four have several subtasks, many of which can be considered major efforts.

All of the tasks initiated by the Analyst were completed. While some of the reports do not have the value to the Police Department that was originally intended, all have input into the total system.

In the following sections, the "system" is defined more precisely.

The Management System

After spending time with Department personnel, PMS observed a system of resource management and budgeting that was remarkable for a small department. The system meets all the requirements of what is normally called Management By Objectives, but the Department hesitates using that term.

The project development and implementation were very well documented in the report, A Systematic Approach to Management Information for a Small Police Department. This report on the Administrative Support Services Unit was prepared by the Administrative Analyst and issued by the Office of the City Manager in July 1976. The conclusion of the report cited the accomplishments of the project as assessed by the project personnel:

The City of Lake Forest engaged in this project to develop the necessary information and procedures to aid the management of the police department in more effectively and efficiently utilizing the resources of the department. Additionally, the project was to develop computer applications where feasible for the project.

As demonstrated, the project was able to develop computer applications for all information systems designed. The amount and type of data produced by these applications would require many manhours to produce by hand. In most instances this information, if produced by hand, would be out of date by the time it could be created. With the designed systems, management is able to have at its request the necessary information needed to make timely decisions for the most effective and efficient utilization of resources.

The computer applications of the management information system were the key to the apparent success of the Lake Forest project. Accordingly, PMS recommended in its interim evaluation report that the Lake Forest experience should be examined in detail -- particularly in terms of the transferability of reports, programs, and procedures. The following section provides a more in-depth review of the three functional components that later evolved to become the major subsets of the total system.

Primary Subsystems of the Lake Forest System

As mentioned previously, the city of Lake Forest has a population of approximately 17,000. The police department operates with 36 sworn officers. This department processes approximately 11,000-12,000 calls for service each year. The rate of occurrence of Class I crime is very low, with vandalism and thefts comprising a large percentage of serious calls for service. With this kind of background, Lake Forest saw a need for management support from a computer system rather than for operational support. The three primary subsystems were:

- A UCR system
- A Crime Analysis System (an outgrowth of the UCR)
- A Career and Organizational Assessment and Development System (COADS).

(1) UCR

The State of Illinois is a participant in Uniform Crime Reporting. As with other states, Illinois adopted its own methods of reporting which vary slightly in categorical content from the FBI's UCR. These differences do not affect national reporting as there is no overlapping of categories.

Each jurisdiction within Illinois has a reporting responsibility and has developed procedures to meet that responsibility. Lake Forest saw where their city's computer could help them and developed a system incorporating that capability.

The system entailed not only the addition of automation to the already existent procedures, but brought significant changes in the department's reporting forms and procedures, providing a real integration in the reporting process.

The reporting process begins with the call for service. The Communications Operator records the call for service on a Dispatch Card. The offense classification code and the geographic code is added to the Dispatch Card. If the nature of the complaint does not require a report from the officer, the officer advises the Communications Operator and a disposition will be added to

the Dispatch Card. No further reporting is required. If a report is required, the officer writes a report and assigns a crime code. The Shift Sergeant reviews each report and assists the officer with the crime code classification.

The Dispatch Cards and Reports are matched and reviewed by the Communications Operator and are then forwarded to the Records Unit. The Records Unit processes these reports on a daily basis and forwards them to the City Data Processing Unit where they are keypunched. Upon return, the cards are filed in the Records Unit.

Every week or ten days, the keypunched cards are edited by the computer and a listing of the data produced. This listing is reviewed and the data checked by experienced personnel. This data, once resolved, is merged with data for the current month previously processed. At the end of the month, the total edited and corrected file for that month begins processing. Once processed, the IUCR reports are produced. These reports are sent to the Communications Operator where they are entered into LEADS via CRT for processing by the State.

(2) Crime Analysis

With the automation of UCR, a data base was available from which analysis could be made. The objectives of these reports are to aid the police command staff in decisions concerning personnel deployment, manpower allocation, and individual and departmental performance. The reports included in this system are listed below.*

Property Information Report. This report supplies a list of the items of property which have been reported to the department as stolen, recovered, or destroyed. One purpose of the report is for use as a desk reference by the investigators when attempting to locate a case where a recovered item has been reported stolen.

Another use for the report is that management can identify the stolen and recovery rates on certain items of property. The dollar amounts are available for stolen, recovered, or destroyed property on a monthly basis.

* The descriptions were extracted from A Systematic Approach to Management Information for a Small Police Department.

Workload Analysis Report. The Workload Analysis Report indicates the time of day during the month when calls for service were received. Additionally, the report scores the calls to the shift upon which they were received. This report is produced on an individual grid/subgrid basis.

Crime Analysis by Location Report. This report provides information by the types of calls for service (crime classification) and by the geographic location of the call.

Report/Incident Analysis by Day of Week/Time of Day. This report indicates the number of reports and incidents the department handles by the day of the week, i.e., all Sundays, Mondays, Tuesdays, etc., and the hour of the day.

Report Time Analysis. This report provides information on the time needed to write reports by specific crime classification. The report shows the number of reports and the time required to write reports by crime classification for the entire department on a current month and year-to-date basis. The report also indicates the average amount of time required to write a specific type of report.

Crime Analysis by Class/Time. This report indicates the types of services or offenses by crime classification and the hour or time span in which the incident occurred.

Case Status Information Analysis. This report indicates by percent and raw numbers the cases which have been cleared by arrest, exception, or are unfounded on a monthly and year-to-date basis.

(3) COADS

One of the most frequently endorsed approaches to modern management techniques is called "Management by Objectives." This approach has not become common in police departments for a number of reasons such as:

- Lack of general city accounting capabilities to implement it
- Lack of internal capability to support an additional accounting procedure
- Lack of expertise to implement such a program.

As described earlier, the Lake Forest Police Department with its COADS system has made a significant advance in management techniques and processes. The automated system which supports COADS resulted from the Goals and Objectives established earlier in the system development. The system takes

information from the Case File (developed under UCR), general accounting information, and other needed supportive data to form the basis of the reporting system. The reporting system supports three areas:

- Organization Assessment
- Productivity Evaluation
- Personnel Assessment.

Organization Assessment provides the department with the capability to measure the organization's performance as well as individual performance. Management can determine the extent of the organization's contribution towards its objectives. Again, excerpts are taken from the Lake Forest report to provide descriptions of the two reports produced by this part of the system.

Personnel Duty/Program Report. The Personnel Duty/Program Report is produced on a monthly basis. This report lists all work performed by each employee for the month and the year-to-date (fiscal year). Additionally, this report indicates the last month and year when a specific duty was performed. The report lists all duties performed and then accumulates the duties to activity levels, activities to program levels, and programs to objective levels.

Department Duty/Program Report. This report provides management with the necessary information to assess the organization's performance. The report lists all duties, the amount of time spent on each, and volume for selected duties for all department personnel combined for the month. These duties are accumulated to activity levels, activities are accumulated to program levels, and programs are accumulated to objective levels.

The process of the Productivity Evaluation emphasizes the objectives of the System itself.

The Administrative Aide compiles reports using information from the different systems:

- The Crime Analysis System
- The Payroll System
- The General Accounting System
- The COADS System itself.

The analysis and interpretation of the data is the responsibility of management personnel.

Personnel Assessment is intended to fulfill management's responsibility to evaluate the individual performance and progress of employees. The system provides the following reports:

Personnel Assessment Reports. A series of monthly Personnel Assessment Reports are produced. These are used to build the data for the periodic assessment of personnel. Additionally, information from these reports is given monthly to the officers in the department so that they can have a review of their performance for the month and compare performance to past months.

Monthly Shift Assessment Report. The Monthly Shift Assessment Report is produced on a monthly basis. The report lists each duty the officer performed and the amount of time spent on that duty. These duties are compared to the officer's total available manhours for the month. The last page of the report is a summary of duties for all personnel on the shift and the percent of manhours spent on each duty.

Monthly Personnel Comparator Assessment Report. The Monthly Personnel Comparator Assessment Report provides quantitative information which goes into the officer's personnel file for the periodic assessment review. This information is a comparison of the number of times selected duties were performed by the officer. The highest number of occurrences is considered to be the best performance. The performance of each officer is automatically scored within these selected duties in comparison to every other officer on the same shift for that month. Each man is compared against his peers during the same working hours.

The following is a list of those duties used in the comparator report:

- Premises Examinations
- Booked Arrests
- Apprehension for Other Agencies
- Code Violations Issued for Animal Calls
- Radar Violations
- Non-Radar Violations
- Motorist Assists
- Reports Initiated
- Field Interrogations
- Credit Arrests
- Code Violation Warnings
- Meter Violations
- All Other Parking Violations
- Radar Warnings
- Non-Radar Warnings
- Incident Initiated
- Arrests at Accidents.

Transferability Potential

To assess transferability, a level of system transfer must be established. For this purpose, we will address the system in Lake Forest at three levels:

- Concept -- the concept level of technology transfer involves using ideas from particular application programs, the identification of files required to support these applications, the general contents of output records.
- Design -- transfer at the design level refers to the adoption of another agency's programming specifications, procedures for collecting data, data element definitions etc..
- Operational -- transfer at the operational, or "code" level implies use in the recipient agency of actual programs, forms, output report formats, access instructions, etc.

When moving from the concept through the operational level, the environment within which the system resides becomes increasingly critical. Many examples of technology transfer of the conceptual level can be given. Virtually all state-level law enforcement support systems have conceptual commonalities. However, commonality at the code level within these systems becomes very difficult to find. Differences between the donor and recipient cause the difficulties. The most common areas in which differences occur are:

- Differences in the organizations' objectives and priorities
- Organizational differences
- Operational differences
- Political differences
- Technical differences.

In every case of technology transfer, differences must be assessed and specific conflicts resolved before a reasonable determination as to what level of transfer should take place.

Concept Transferability. All three systems as discussed above are candidates for transfer at this level. With the current trend in computer technology towards lower-cost, higher-capability systems, more departments will be finding "automation" within their reach. With the computer capability, it is only logical to develop an automated system to replace the manual method of UCR products and to use the resultant data base to provide management with useful crime analysis data.

The conceptual transfer of UCR is one that is straightforward. It results from specific formats and requirements set by the State of Illinois. The transfer of the Crime Analysis concepts requires closer examination by the possible recipient. The report generated by the Lake Forest system may not meet the requirements of the department seeking a transfer. The extent to which the reports serve a need will determine what should be used by the recipient. It may be that the basic idea of using the UCR file as a basis for crime analysis may be the limit of transfer.

Certainly Lake Forest has proven that its system is a viable management method. The two main ingredients to implementing such a system are:

- Desire for a system
- Budgetary flexibility.

Once the ingredients are present in an agency, a self-evaluation similar to that performed by Lake Forest must be accomplished. The results must then be compared to the program at Lake Forest. The extent to which there is a match indicates the degree of transfer that can be made.

Design Transfer. Transfer at the design level should only be explored if Conceptual Transfer is possible without significant modification and if the recipient's technical environment is similar to that in Lake Forest. The systems developed in Lake Forest were designed for an IBM System III, a card-oriented computer system. This environment restricted the system development to using card file procedures. When comparing the necessary system components to a tape or disc system, we found them extremely cumbersome and inefficient. The technology and related costs available today demand the acquisition of hardware systems that use other media besides cards for data base development. If a department uses a card-oriented system and plans to continue with that system for three years, a system-level transfer from Lake Forest is reasonable.

Lake Forest is currently upgrading to a disc-oriented system and is in the process of converting their systems and programs. The conversion is on a program-by-program basis. The evaluation team believes that the system will be redesigned after the conversion is made.

CONTINUED

1 OF 3

Operational Transfer. The programs in Lake Forest are all written in RPG. If a system-level transfer is warranted and the computer system receiving the transfer supports RPG, the chances for an operational transfer are extremely high. The amount and quality of documentation available is excellent. Virtually all levels are covered:

- Concept level
- Functional level
- System level
- Program level.

Summary Comments

The Lake Forest Police Department has developed a management philosophy and a supporting computer system. The evaluation team was impressed with what has been accomplished in a relatively short period of time.

The method of development is interesting from a conceptual viewpoint. An analyst was hired to design and program the computer system. Once the system was completed, the analyst terminated employment. While the termination was not originally planned, there are lessons to be learned from the experience. To execute a planned change, an agency can consider hiring a person for a short-term effort with the full realization that the person will not be with the agency after work is completed. There are both advantages and disadvantages to this approach. In Lake Forest it was an accidental, but successful, endeavor. The department has developed the system it wanted.

A key disadvantage is that it is not easy to find a person willing to take short-term employment. Toward the end of that employment, the agency must be sure the system operates correctly and is well documented. If these disadvantages are overcome, the concept for developing a system in this manner is viable.

I. DEERFIELD

Introduction

Grant number 1481 was awarded to the Deerfield Police Department to develop a planning and research program using 1974, project area 5g monies. The amount of the award was \$27,851 and funded the position of one civilian planner. The term of the award was from October 1974 through September 1975. Succeeding step down funding was provided through grant 2078 (project area 10h) and 1439 (project area 3d). Grant funding expired January 31, 1978.

The Deerfield Police Department had 27 sworn officers at the time of the initial grant and served a population of approximately 19,000 persons.

Project Activities

Although the grant was awarded in September, 1974, the planner was not hired until January, 1975. Further difficulties were experienced when the Chief of Police resigned in December, 1974. The present Chief was appointed in June, 1975. Notwithstanding the slow start-up of grant activities, there were 16 activities pursued over the three year period as shown in Table 10. Most were one-time efforts ranging from revision of police report forms to planning a new police facility.

One of the key activities was the inventory and flow analysis of records in the department. It was a three month effort which laid the foundation for later data processing development. Several written products resulted from the study of which the main product was a document entitled "Report on the Deerfield Police Status of Records System and Recommendations for Improvement" dated October, 1975. The report contains four major sections covering (1) the status of the record system at that time, (2) information needs of the department, (3) alternative methods of record processing, and (4) implementation alternatives. Numerous flow diagrams were also presented using a PERT format. These diagrams were later very useful to the systems analyst who designed the automated system.

Table 10

PROJECT ACTIVITY OVERVIEW FOR DEERFIELD

PROJECT ACTIVITIES	PLANNED ACTIVITY		DEGREE OF IMPLEMENTATION	ACTIVITY RELATED TO COMMON OBJECTIVES	TENURE OF ACTIVITY	SCOPE OF EFFORT	COMMENTS
	Detailed In Grant Application	Initiated After Project Started					
1. Inventory and flow analysis of records and information system of the Department	Yes	Yes	Completed	Objective 1	One-Time	Major	This initial effort to document the information processing became the foundation for the future automation of records.
2. Information requirements analysis	Yes	Yes	Completed	Objective 1	One-Time	Major	This activity was a culmination of the previous activity and resulted in the baseline specifications used to develop an RFP.
3. Planning and coordinating the use of outside consultants for development of the EDP system	Yes	Yes	Completed	Objective 1	On-Going	Major	Progress reports indicate that outside consultants were hired in March 1976. Two years later, the system has not yet become fully operational.
4. Study of inventory control system	No	Yes	Completed	Objectives 1 and 4	One-Time	Significant	The records study indicated that there were several weaknesses in accountability and chain of custody for property and evidence. New procedures and forms were developed for control purposes.
5. Revision of police report forms	No	Yes	Completed	Objective 1	One-Time	Significant	The records study pointed out that eight different forms were being used. Analysis and consolidation resulted in the development of five forms to replace the eight.
6. Published annual report	No	Yes	Completed	Objective 1	One-Time	Significant	Planner utilized an outside printer to publish an elaborate report. Cost was objectionable to the City Council, however. Department now just provides basic statistics.
7. Analysis of personnel and supervisory needs (OIC study)	No	Yes	Completed	Objectives 2, 3, 5, & 6	One-Time	Major	The planner, as directed by the city manager, analyzed the need for supervisors in preparation for contract negotiations with the patrolmen's association.
8. Command reorganization study	No	Yes	Completed	Objectives 2, 3, and 5	One-Time	Major	The results of the OIC study were combined with some recommendations of an earlier IACP review of the Department. A command reorganization was instituted.
9. Analysis of training and educational needs of the Department	No	Yes	Completed	Objectives 3 and 6	One-Time	Major	The efforts of the planner established parameters for educational incentives. Procedures established guidelines for course and curricula areas of improvement.
10. Analysis of task capabilities of sworn and civilian personnel	No	Yes	Completed	Objectives 3 and 6	One-Time	Major	As a result of the OIC study, the Village Board realized the need to establish position descriptions. All positions have now been formalized and a position classification manual developed.

Table 10 (cont)

PROJECT ACTIVITY OVERVIEW FOR DEERFIELD

PROJECT ACTIVITIES	PLANNED ACTIVITY		DEGREE OF IMPLEMENTATION	ACTIVITY RELATED TO COMMON OBJECTIVES	TENURE OF ACTIVITY	SCOPE OF EFFORT	COMMENTS
	Detailed In Grant Application	Initiated After Project Started					
11. Planning for the delivery of contractual police services	No	Yes	Completed	Objective 3	One-Time	Major	Provided for contractual delivery of police services to Riverwoods. The planner was instrumental in defining costs and the contents of the contractual agreement. A six month pilot effort was initiated. The citizens of Riverwoods rejected the contractual agreement by referendum.
12. Revision of rules, regulations, and procedures	No	Yes	Partially Completed	Objectives 3-5	One-Time	Significant	An initial attempt was made to redo the policy manual. Samples were collected from across the country, but the task has not yet been completed
13. Police facility study: needs and expansion planning	Yes	Yes	Completed	Objective 4	On-Going	Major	It was hopeful that a new facility could be built under a Federal grant. The grant as developed by the planner cited deficiencies which led the City Council to approve the expansion of the present facility.
14. Grant development and monitoring activities	Yes	Yes	Completed	Objective 8	On-Going	Significant	Planner assisted in the development of several grant programs, most notably was the "Deerfield Plan" to attack juvenile delinquency.
15. Inter-local communications and police systems	Yes	Yes	Abandoned	Objective 1	---	---	Some effort was made to bring other agencies into the automated system being developed by Deerfield. It, however, appears that there is little local interest in a combined system.
16. Introduction of modified MBO concepts within the Department	Yes	Yes	Abandoned	Objectives 3 and 4	---	---	The reviewer found no evidence of MBO planning during the grant period.

A presentation to the city council was also made which outlined the results of the study including the following:

- Users of Data Generated by the Police
- Importance of Data in the Solution of Problems
- Police Activity Requiring Management of Input
- Police Functions in the Processing of Data
- Police Reports Required by Law
- Police Reports Required for Good Management
- Desirable Police Reports.

The presentation was very effective in obtaining city council support.

An inventory control system study was conducted as a result of the records study. Several weaknesses in the physical property and evidence control system were identified -- particularly in the areas of documentation for accountability and chain of custody. As a result of the study, new control forms were developed and new procedures were implemented to provide adequate control mechanisms.

Another direct result of the records study was the development of a single case report form. The department had previously used eight different crime reporting forms as well as an accident form, incident report form, and arrest report form. The case report forms were consolidated into one form.

Another activity of the planner was an analysis of personnel and supervisory needs of the department. Between January, 1975 and July, 1975, the department was supervised by an acting chief. During these months, contract negotiations were conducted between the Deerfield city government and the bargaining agent for the police department. A point of concern was the position of "OIC", a position with supervisory responsibility on the shifts but with no rank or pay differential. The village manager requested the planner to research the following areas:

1. A study of Deerfield's Police operation to determine how many personnel with command responsibilities are required to cover all shifts.

2. A study of the command structure of other police departments serving approximately the same population and report on how they handle the problem.
3. A recommendation of alternative structures that might be used to resolve this problem in our department, together with the advantages and disadvantages of each.
4. A recommendation on how the recommended structure might be implemented with due regard to legal requirements, operating efficiency, department morale, and avoidance of the All Chiefs and No Indians syndrome that Mayors, Boards, and Managers complain about so often.

The resulting study was again a clear and thoroughly researched document. It covered all the issues in a logical and concise format. The document itself served as the basis for several management decisions regarding personnel administration within the department.

The planner also became involved in the planning of a new police facility. The department had outgrown its structure because of expanded specialized needs. A new state code regulating local jail operations compounded the problems with the existing facility. The planner was given the responsibility of developing a plan to alleviate the space problem.

At first it was believed that a new facility could be built under a grant from the Public Works Employment Act of 1976. With this thought in mind, the planner developed a report entitled "Deerfield Police Department Pre-Architectural Research Site Location and Evaluation, October 4, 1976".

This report documented the following needs:

- Site size (total)
- Estimate of space requirements for each division (interior)
- Outdoor space requirements
- Site requirements for two story and one story facilities
- Survey of available land
- Recommendations on site selection
- Site selection criteria
- Site evaluation and availability.

Unfortunately, the grant from the Public Works Act never materialized but the exercise was beneficial in that it pointed out the department's non-compliance with the new state codes on the operation of the jail. The end result was that the village council approved the expansion of the current facility.

A final key activity was the planner's involvement in developing a contractual delivery plan for the village of Riverwoods by the Deerfield Police Department. The planner defined the costs of the service and made recommendations on the contents of the contractual agreement. After considerable study, a pilot agreement between the two jurisdictions was initiated in March 1977 which called for a six-month period to allow the residents of Riverwoods the opportunity to assess the service delivery. The final agreement had to be approved by referendum of the citizens of that community. While there was no dissatisfaction with the service, the citizens of Riverwoods rejected the proposed program, ostensibly because of increased costs over the services provided by the county sheriff.

The above discussion shows that the planner was involved in a wide variety of activities. Eleven were classified as one-time planning efforts indicating that the planner was used as a resource by both the police department and the village.

The grant funding ended on January 31, 1978, which was also the last day of employment for the planner. The Chief believed that a department the size of Deerfield could not possibly justify the expense of a planner on a full-time basis. As an alternative, he was negotiating with Northwestern University for an "Administrative Exchange"; or in other words, he was attempting to obtain an academician to be utilized as a planning resource on short-term basis. The approval was obtained and the plan was finalized.

The title of the new position is "Director of Administrative Services." According to the Chief he will have supervisory responsibility over: 1) records and communication; 2) fiscal affairs; 3) research and development; and 4) training. The Chief explained that the first two areas are well

established and will continue under present operating conditions. Most of the time, the exchange person would be devoted to research and development areas together with training.

The Chief envisioned that research and development projects will be assigned to various members of his staff, including street officers on a rotating basis. The police staff will then work with the academician who will provide technical assistance and general guidance in the various assigned projects. The primary emphasis, then, will be on training to develop the permanent police staff in methods of conducting extensive research and planning.

It is anticipated that the exchange position will rotate on a yearly basis. The cost to the department is \$23,000 per year which is paid directly to the University. The University offers the department a list of candidates from which the Chief makes the selection.

This concept is not new, but there have only been one or two other instances where the exchange has been made in the law enforcement sector; and those programs were not of a permanent nature. The department and the individual from the University are likely to benefit from the exchange of information.

The first agreement became effective on April 10, 1978. The evaluation team interviewed the individual assigned by the University and found that he is indeed following up on many of the projects initiated by the original grant planner. Implementing the EDP system and preparing a policy and procedures manual are two of the primary tasks.

As concluding remarks, the evaluation team believes that the Deerfield planner under the grant activities was ambitious and very zealous in his activities. This is reflected by the fact that the Department is in the process of developing an automated information system.

The automation has become a point of interest to the evaluation. The following section provides a comparison assessment between the Lake Forest efforts and those of Deerfield with a view toward transferability to interested departments.

Transferability Potential

The City of Deerfield is slightly larger than Lake Forest with an approximate population of 17,500. Its calls for service, however, far exceed Lake Forest with an expected 25,000-30,000 calls for the current year. With much more frequent operational requirements, Deerfield's emphasis is understandably on operational support and management information concerning the operational activity of the department.

To develop its system, Deerfield chose to contract the needed services at the same time that the computer system was purchased. This effort was combined with the acquisition of a financial system for the city. The computer system selected was a Texas Instrument 990 disc oriented system and the contractor was to supply software modified to the specifications of Deerfield.

The basic idea behind the system was to collect data from the dispatch ticket and form a detailed data base from which reports could be generated. Anticipated reports that could be generated on a demand basis included the following:

- Offense Analysis (type of offense, location, time of occurrence, property involved)
- Service Incident Analysis (type of incident, location, time of occurrence, and applied investigation time)
- Traffic Analysis (type of accident, time, location, and contributing conditions)
- Citations Analysis (moving violations, outstanding violations list)
- Arrest Analysis (cases cleared, reasons for clearances, adult analysis, juvenile analysis)
- Officers Activity (investigations, arrests, in service time analysis, court appearances, traffic ticket accountability).

At the time of the evaluation, the only operational system was a file for incidents. The file was reasonably complete and contained property information.

As with Lake Forest, three levels of transferability can be considered: concept, design, and operational. Transferability at any of the levels is difficult to assess since the system is still in the development stage. Two critical ingredients to transfer at any level are documentation and a fully operational system. Neither are yet available at Deerfield. Some key pluses, however, are:

- A system programmed in COBOL
- Applications that are the most commonly sought by small to medium-sized departments
- A modem system concept that uses point of origin data capture techniques
- The use of a computer system that is well within reach of the smaller municipalities and still able to support a multiple function environment.

Because of these points, the evaluation team found the Deerfield system promising in relation to its potential for serving other small to medium-sized police departments. To fully develop this potential, encouragement should be given to support documentation at the following four levels:

- Purpose or objective level
- Functional level
- Design level
- Operational or program level.

The first two will serve to determine if a "Concept Transfer" is warranted from Deerfield to an inquiring department. The design documentation will serve to evaluate if the system will operate efficiently in the technical environment into which it may be transferred. The last level would be the basis by which the operational transference can be made and leave the receiving department with a real capability in modifying the system.

Summary Comments

The Deerfield project is typical of many of the other projects evaluated in that the planner did an excellent job during his tenure but the Chief could not justify a full-time position afterwards. All persons interviewed at the department believed that the planner had made a definite contribution. He completed several studies which will have a long-range effect on the

department. The analysis of personnel and supervisory needs of the department was particularly important as was the design of the new facility.

Unlike the other projects, the Chief has taken an important step in continuing the planning activities in his department. The agreement with Northwestern University for a staff person is an excellent alternative for a medium-size police department. The person from the University has responsibilities in the planning area as well as in training and fiscal affairs. Thus, the department continues the planning activity at the level of effort needed and also gains expertise for other needed areas. We consider this approach a viable alternative for other agencies and discuss it further in Chapter IV, Program Area Guidelines.

J. ELGIN

Introduction

Grant number 2669 was awarded to the Elgin Police Department under 1977 (C4 project area) funding. The total grant budget of \$35,900 supported a Planner/Analyst and a secretary. The term of the award was from August 1, 1977 through July 31, 1978. The Elgin Police Department comprised of 92 sworn officers serving a population of approximately 61,000 persons.

The grant officially began on August 15, 1977 with the hiring of the planning specialist. The project was, therefore, still in its first year of operation at the time of the evaluation.

Project Activities

Table 11 summarizes the 11 activities of the project. All but one were completed during the grant funding. Seven activities were classified as on-going which indicates a good degree of success on activities undertaken.

One of the major activities of the planner was a review of current records and reporting system. It was initiated prior to the start of the grant. The planner formally documented the system and developed a five year plan. The plan was well prepared and consisted of four primary sections:

Table 11

PROJECT ACTIVITY OVERVIEW FOR ELGIN

PROJECT ACTIVITIES	PLANNED ACTIVITY		DEGREE OF IMPLEMENTATION	ACTIVITY RELATED TO COMMON OBJECTIVES	TENURE OF ACTIVITY	SCOPE OF EFFORT	COMMENTS
	Detailed In Grant Application	Initiated After Project Started					
1. Computerized bicycle registration system	No	Yes	Completed	Objective 1	One-Time	Significant	Converted a manual system to a computerized system. The new system maintains three files by: <ul style="list-style-type: none"> • serial number • license number • alphabetical listing.
2. Review of current records and reporting practices - five year plan developed	No	Yes	Completed	Objectives 1 and 2	One-Time	Major	Activity started prior to grant. Completed by the Analyst. Developed a five year plan for developing automated records system.
3. Offender tracking system	No	Yes	Completed	Objectives 1 and 2	On-Going	Major	The need was defined for tracing and documenting the flow of certain offense categories from point of arrest to final disposition.
4. Redesign automated reports	No	Yes	Completed	Objectives 1 and 2	One-Time	Major	As a result of the records study and a user needs analysis conducted by the analyst, the "Police Activity Report" and "Traffic Citation Report" were redesigned.
-78- Repeat offender bulletin.	No	Yes	Completed	Objective 1	On-Going	Significant	As a service of crime analysis, the analyst publishes a repeat offender description within the daily bulletin.
6. Keysort system	No	Yes	Partially Completed	Objectives 1 and 3	On-Going	Major	Elgin has developed an MO file and Field Contact file modeled after LCCATE, but also uses an MO sheet for control purposes. The system is new and has not made significant contributions.
7. Meter maid productivity study	No	Yes	Completed	Objectives 3	One-Time	Minor	A need was identified to study the overall productivity of the meter maids. The study was instigated outside of the Department, and it fell upon the analyst to conduct the study.
8. Five year planning effort	Yes	Yes	Completed	Objectives 1-5	On-Going	Major	A comprehensive five year planning effort is being conducted by the Lieutenant in charge of planning. Much of his input is from the analyst.
9. Special research projects	No	Yes	Completed	Objectives 1 and 3	On-Going	Minor	Downtown business sector crime has been of special concern to the city. The analyst issued a comprehensive comparative report providing a complete analysis of the downtown area.
10. Routine reports	No	Yes	Completed	Objective 1	On-Going	Significant	The analyst prepares three routine reports: <ul style="list-style-type: none"> • monthly • quarterly • yearly.
11. Crime analysis activities	Yes	Yes	Completed	Objectives 1-3 and 5	On-Going	Major	The analyst has contributed significant data to the investigative and patrol elements of the Department as trends are identified and problem areas defined.

1. Data Processing. This section reviewed the data processing implementation in four graduated time periods. For each period, the functional needs of the system implementation were discussed with appropriate budget factors in terms of hardware costs.
2. Time Factors for the Entry of the Present Central Index File. This section discussed the automation of the Central Index File in terms of the hardware requirements and the time needed to convert records.
3. Personnel. This section discussed the present and projected personnel needs as the Department converts to the automated system. The projections also covered the necessary budgeting areas for personnel salaries.
4. Equipment. This section detailed the increases in equipment by each of the four time periods in terms of hardware and other costs.

As a result of the records study, several changes were made to the automated "Police Activity System" reports. The main reports modified were the Weighted Incident Time Analysis Report, the Number of Service Calls Report, and the Weighted Incident Analysis Report.

The new reports designed included:

- Number of incidents by Primary Incident Area (PIA) by day of week
- Burglaries by PIA by day of week
- Vandalism by PIA by day of week
- Thefts by PIA by day of week
- "Complaint Received Analysis" cross referenced by watch and day of week
- "Officer Initiated" column was added to the current month and year to date sections of the Officer Time Analysis Report.

The reports were designed by the analyst. The deleted reports eliminated unnecessary effort to process data that was not needed. The additional reports allowed the analyst the opportunity to conduct a more finite analysis of certain target crime problems as discussed and described in the grant application.

Another activity was a request from the Chief to document the flow of certain offense categories through the system from point of arrest to final disposition. The offense categories were shoplifting, vandalism, robbery, burglary, and driving while intoxicated. A separate tracking form was developed for each offense. The tracking system was designed as a short-term manual system. There was no plan to automate the system since the city intended to implement a prosecution management information system in the future.

Another time-consuming activity by the analyst was the development of an automated bicycle registration system. The automated system established three files using a batch processing method:

- Serial Number Listing
- License Number Listing
- Alphabetical Listing by Owner Name.

Each report was distributed to investigations, communications, and records. With the automated format and three indexes, increased access and a more rapid retrieval system was established. Additionally, the new system effectively reduced congestion created by written records. It was also reported that the system facilitated the recovery of lost and stolen bikes.

Finally, the analyst prepared three reports on a regular basis.

1. Monthly Report. This report compared crime during the current month to the same month of the previous year. It covered both Part I and Part II offenses and gave information on the actual offenses, unfounded offenses, cleared offenses, and a year-to-date total. Property lost, property recovered, and arrests were also noted.

2. Quarterly Report. The quarterly report was prepared for the signature of the Chief and was one of the primary reports developed for the City administration. The report covered several aspects of Department operations, including Community Relations/Crime prevention and training. The report contained the same type of crime data as provided in the monthly report with the addition of data on traffic arrests.

3. Yearly Report. The yearly report was a crime statistical report with the same basic data as contained within the monthly report. However, extensive analysis of the yearly data was provided in narrative form as well as the summary data.

Elgin was selected for an in-depth review based on the fact that the project had become involved in many planning functions. The purposes of the in-depth review were to (1) determine the degree of acceptance by the rest of the Department of the Planner/Analyst function, (2) examine the communications flow between the analyst and the rest of the Department, (3) review the type of planning activities which the analyst participates in directly, and (4) provide a measurement of the analyst's contribution to the departmentwide planning function.

In order to accomplish the above tasks, a questionnaire was administered to representatives of the various organizational units within the Department. The first six questions dealt with different types of police planning. Again, the intent of these questions was to determine the extent of involvement and acceptance of the Planner/Analyst.

The first question was on formal planning:

1. For purposes of any type of formal planning (e.g., where outcomes and alternatives are weighed and implementation process designed), how often are contacts made between you and each of the following units or individuals? (Choose the best answer for each of the other units and place it in the appropriate space.)

0 = No contact
1 = A few times a year
2 = About once a month
3 = About once a week
4 = Once a day
5 = Almost hourly
6 = Continually

_____ Chief of Police
_____ Deputy Chief of Operations
_____ Deputy Chief of Administration
_____ Assistant to the Chief for Planning
_____ Central Records/Communications
_____ Community Relations/Crime
Prevention
_____ Planning/Crime Analyst
_____ Patrol
_____ Major Investigation Division
_____ Training
_____ Traffic
_____ Support Services

Each respondent thus filled in a number between 0 and 6 for each space on the right which reflected the relationship between the respondent and the person/unit in regard to formal planning. The results were then tabulated to produce the averages shown in Table 12.

Table 12 shows that formal planning most often involves the Deputy Chief and Chief. There is almost daily contact on formal planning with these two persons. The Planning/Crime Analyst has an average score of 2.7 which ranks him fifth in terms of frequency of contact. The conclusion is that the analyst is contacted on formal planning but not to the degree of key command personnel.

The other questions were on other types of planning: Informal, Operational, Administrative, Procedural, and Tactical. Table 12 shows that the analyst is above the average more on administrative and tactical planning. Administrative planning included budget development, personnel selection, and personnel training. Tactical planning was defined as planning for specific situations at known locations. The above average score for administrative planning probably reflects the analyst's daily contact with command personnel. The above average score for tactical planning probably reflects the crime analysis and forecasting activities of the unit.

Table 13 tabulates the responses of only the command personnel. It shows that the Planner/Analyst is rated higher by the command staff than by the members of the operational units. The contribution to the informal planning process increased significantly when viewed only by the command officers.

Table 14 analyzes how well the Planner/Analyst communicates and coordinates with other units. Question 9 asks:

9. How important are the contacts with each of these units/individuals to the planning and production of your own unit?

- 4 = Very important
- 3 = Moderately important
- 2 = Slightly important
- 1 = Not at all important

- _____ Chief of Police
- _____ Deputy Chief of Operations
- _____ Deputy Chief of Administration
- _____ Assistant to the Chief for Planning
- _____ Central Records/ Communications
- _____ Community Relations/Crime Prevention
- _____ Planning/Crime Analyst
- _____ Patrol
- _____ Major Investigation Division
- _____ Training
- _____ Traffic
- _____ Support Services

TABLE 12
TOTAL RESPONSE
Sociometric Planning Analysis

Respondent	Chief of Police	Deputy Chief of Operations	Deputy Chief of Administration	Assistant to the Chief for Planning	Central Records/ Communications	Community Relations/ Crime Prevention	Planning/ Crime Analyst	Patrol	Major Investigation Division	Training	Traffic	Support Services	Average Response
One: Formal Planning	3.4	3.8	2.2	2.8	2.7	2.2	2.7	3.2	2.6	1.8	2.5	1.6	2.6
Two: Informal Planning	3.8	3.8	2.9	2.5	3.1	2.7	2.4	2.9	3.2	2.4	2.3	2.0	2.8
Three: Operational Planning	2.3	2.7	1.9	2.6	2.4	1.7	2.3	1.9	2.1	1.6	2.0	1.1	2.2
Four: Administrative Planning	1.8	1.8	1.3	1.5	0.9	0.6	0.9	1.1	1.1	1.5	1.1	0.8	1.2
Five: Procedural Planning	1.6	1.9	1.1	1.8	1.2	0.9	1.1	1.4	1.4	1.4	1.2	1.2	1.4
Six: Tactical Planning	1.1	1.1	0.9	0.8	0.6	0.6	1.1	1.5	1.4	0.5	0.8	0.5	0.9
OVERALL AVERAGE	2.3	2.5	1.7	2.0	1.8	1.5	1.8	2.0	2.0	1.5	1.8	1.2	1.8

TABLE 13
 COMMAND RESPONSE
 Sociometric Planning Analysis

Question	Chief of Police	Deputy Chief of Operations	Deputy Chief of Administration	Assistant to the Chief for Planning	Central Records/ Communications	Community Relations/ Crime Prevention	Planning/ Crime Analyst	Patrol	Major Investigation Division	Training	Traffic	Support Services	Average Response
One: Formal Planning	4.5	4.3	3.6	4.3	3.4	2.9	3.9	2.9	2.9	3.3	3.1	2.2	3.4
Two: Informal Planning	4.3	4.0	3.5	4.6	3.6	3.9	3.8	3.3	2.8	3.3	3.0	2.6	3.6
Three: Operational Planning	3.8	3.6	3.4	4.1	3.6	2.6	3.3	2.0	2.5	2.8	2.5	1.4	3.0
Four: Administrative Planning	2.6	2.8	2.1	2.4	1.2	0.8	1.3	1.5	1.5	2.0	1.3	1.2	1.7
Five: Procedural Planning	2.4	2.6	1.6	2.4	1.5	1.1	1.5	1.7	1.7	1.6	1.2	1.6	1.7
Six: Tactical Planning	1.5	1.4	1.4	0.9	0.6	0.7	1.6	1.4	1.4	0.9	0.9	0.9	1.1
OVERALL AVERAGE	3.2	3.1	1.6	3.1	2.3	2.0	2.6	2.1	2.1	2.3	2.0	1.7	2.4

TABLE 14
 SOCIOMETRIC COMMUNICATION ANALYSIS

Question	Chief of Police	Deputy Chief of Operations	Deputy Chief of Administration	Assistant to the Chief for Planning	Central Records/Communications	Community Relations/Crime Prevention	Planning/Crime Analyst	Major Investigation	Patrol	Training	Traffic	Support Services	Average Response
Nine: Importance	2.9	2.9	2.0	2.4	2.4	1.5	2.2	2.8	2.4	1.8	1.9	1.5	2.2
Fifteen: Communication	3.4	3.1	3.2	3.4	3.1	3.0	3.5	2.4	3.2	3.0	3.0	2.2	3.0
Sixteen: Feedback	3.7	2.2	3.2	3.2	2.7	2.9	3.0	2.3	2.9	2.7	3.0	2.1	2.7

In terms of importance, the analyst received an average equal to the overall average (2.2 in each case). His average is below those of the major command personnel but above the other averages. The conclusion is that the analyst has made progress in establishing the importance of his position in the planning function of the department.

Question 15 asks:

15. How would you characterize the quality of overall communication between you unit and each of the others?

- 5 = Very good communication
- 4 = Good communication
- 3 = Adequate communication
- 2 = Poor communication
- 1 = Very poor communication

- _____ Chief of Police
- _____ Deputy Chief of Operations
- _____ Deputy Chief of Administration
- _____ Assistant to the Chief for Planning
- _____ Central Records/Communications
- _____ Community Relations/Crime Prevention
- _____ Planning/Crime Analyst
- _____ Patrol
- _____ Major Investigation Division
- _____ Training
- _____ Traffic
- _____ Support Services

In terms of communication, the Planner/Analyst ranked highest with an average of 3.5. The conclusion is that he has established himself in terms of communications with the units in the department.

16. Essential elements of the planning cycle are feedback and evaluation. How efficient are each of the units in providing feedback to other interested units of the Department?

- 5 = Provides maximum amount of feedback
- 4 = Provides good feedback information
- 3 = Provides adequate feedback
- 2 = Poor feedback
- 1 = Extremely poor feedback

- _____ Chief of Police
- _____ Deputy Chief of Operations
- _____ Deputy Chief of Administration
- _____ Assistant to the Chief for Planning
- _____ Central Records/Communications
- _____ Community Relations/Crime Prevention
- _____ Planning/Crime Analyst
- _____ Patrol
- _____ Major Investigation Division
- _____ Training
- _____ Traffic
- _____ Support Services

With this question the Planner/Analyst is above average (3.0 compared to 2.7). His average is higher than eight of the units and lower than three units. Once again, the conclusion is that the Planner/Analyst has established himself in terms of feedback and evaluation.

Summary Comments

Given the short time period of the project, considerable progress has been made in several different areas. Of particular importance is that seven of the eleven activities were classified as on-going. This indicates that the results of the planning activities are being implemented and that the unit is involved in the production of many reports for members of the department. The new reports on crime by PIA are good examples of the implementation activities.

We were very favorably impressed with the abilities of the Planner/Analyst in Elgin. He has an excellent background for the position and has established himself very well within the department.

In summary, this project has the potential of being one of the most successful in the ILEC program. Developments in the second and third year of funding will prove its long-range worth.

CHAPTER III OVERALL ASSESSMENT

A. INTRODUCTION

This chapter provides an overall assessment of the nine projects that were funded under the Police Planning and Crime Analysis Program. The conclusions are based on the collective experiences of the nine projects at the time of the evaluation. The next section lists the primary findings of the evaluation. This is followed by a discussion of each finding. The final section presents an "efficiency" analysis of the efforts in each project.

B. OVERALL CONCLUSIONS

ILEC has funded nine projects for a period of one to three years. There has been sufficient experience in these projects to allow some overall conclusions to be made. Based on our evaluation, we believe the major conclusions are as follows:

1. None of the projects established planning as an integral process within the respective agency.
2. Full-time positions for planning or crime analysis cannot be justified in the smaller agencies after the grants ended.
3. Commissioned personnel in the planning position were usually involved in operational planning while civilian planners were usually involved in systems planning.
4. Planners and analysts were usually involved in one-time planning efforts under the grant projects.
5. Grants of 18-24 months are sufficient to establish the planning process in police agencies.
6. Most agencies did not know what to expect from the planning or crime analysis function that was being funded. The Chief of the agency usually defined what the unit was to do.

Each of these conclusions is discussed in the following section. As an aid to some of the analysis, Table 15 provides an overall comparison of the nine projects.

TABLE 15

A COMPARISON OVERVIEW OF ILEC FUNDED PLANNING AND CRIME ANALYSIS PROJECTS

	ONE		TWO	THREE	FOUR	FIVE	SIX	SEVEN	EIGHT	NINE
	EMPHASIS		NUMBER OF PERSONS ASSIGNED UNDER THE GRANT*	TOTAL BUDGET FOR FIRST YEAR OPERATIONS	TOTAL PERSONNEL COSTS FOR FIRST YEAR (Including Fringe)	TOTAL STATE AND FEDERAL INVESTMENT TO DATE	STATE FUNDING EXPIRED?	TOTAL YEARS FUNDED TO DATE	NUMBER OF SWORN OFFICERS SERVED (Full-Time)	POPULATION OF JURISDICTION SERVED
	PLANNING	CRIME ANALYSIS								
DOWNERS GROVE	●		Planner (Lieutenant) Clerk	\$28,192	\$24,245	\$26,782	YES	ONE	50	40,578
ZION	●		Planner (Lieutenant) Secretary	\$32,823	\$29,690	\$31,095	YES	ONE	36	18,500
CAHOKIA		●	Crime Analyst (Civilian)	\$16,732	\$15,221	\$15,896	No -- Now in first year	ONE	21	20,700
CHAMPAIGN/URBANA UNIVERSITY OF ILLINOIS (UofI)		●	Crime Analyst (civilian) Planner (civilian) Secretary	\$73,716**	\$57,804**	\$102,209	No -- Now in Third "Phase"	*** THREE	Champ. 87 Urbana 44 UofI 61 194	Champ. 63,400 Urbana 38,300 UofI 11,100 112,800
DANVILLE/VERMILION CO.		●	Crime Analyst (civilian) Planner (civilian) Secretary	\$62,256**	\$53,700**	\$84,225	No -- Will seek third year funds	TWO	City 68 County 35 103	City 47,000 County 50,000 97,000
DEERFIELD	●		Planner (civilian)	\$27,851	\$24,000	\$50,270	Yes -- Only Project to complete three years	THREE	27	19,000
LAKE FOREST	●		Systems Specialist (civilian) Secretary	\$32,788	\$24,806	\$50,134	Yes -- Did not seek third year funds	TWO	36	17,000
ELGIN	●	●	Planner (civilian) Secretary	\$35,900	\$34,500	\$34,105	No -- Now in First year funding	ONE	92	61,116
KANE COUNTY	●		Planner (civilian) Secretary	\$24,812	\$22,442	\$37,714	Yes -- Withdrew third year application	TWO	51	41,326†
				\$335,070 (Total) \$37,230 (avg)	\$286,408 (total) \$31,823 (avg)	\$432,430			51 (average)	

* Includes secretarial/clerical help but does not include part-time or interns

** Fourteen month award adjusted for 12-month period for comparison purposes

*** Project LOCATE's second funding phase was for a six-month period rather than one year.

† Unincorporated area of Kane County is the figure shown -- total population is 251,005.

C. JUSTIFICATION FOR CONCLUSIONS

1. None of the projects established planning as an integral process within the respective agency.

Each project concentrated on either a major undertaking in the agency or a series of activities that needed attention. For example, the Zion Police Department instituted a team policing project under the grant while the Kane County Sheriff's Department performed a series of interrelated studies under the grant. In each project, the planners and analysts were busy with various activities, but no overall view of the planning function within the agency was taken.

In Chapter II, we referred to this problem as the need for a "plan for planning." By this term we mean simply that the planning function needs to be integrated into the organizational and operational structure of the department. From ILEC's viewpoint, the aim of the grants was not to provide a means of conducting several needed studies, but rather to establish the planning function within the agency. It was anticipated that the Chief and other command personnel in each department would be working toward establishing a formal planning mechanism in their agency. There was no evidence that this aim was accomplished with any of the agencies.

2. Full-time positions for planning or crime analysis cannot be justified in the smaller agencies after the grants ended.

Full-time positions for planning or crime analysis were not continued in Downers Grove, Zion, Deerfield, Lake Forest, or Kane County. There is doubt that the position in Danville will be continued.

The Deerfield project offers the typical experience. The Chief stated that he did not believe that a full-time planning position could be justified in his agency of 27 sworn officers. There was no doubt in his mind that the planner has done an excellent job on the many activities under the grant project. However, the planner resigned from the Department on the day the funding ended and the position was never filled again.

In many of the agencies, there was a need before the grant for a series of planning efforts. The Kane County grant listed 15 studies in its grant application that needed to be performed. After these studies are completed, it is difficult for the agency to keep the planner busy on a full-time basis.

Chapter IV presents several alternatives to performing the planning function in small police agencies. One alternative was suggested by the Chief in Deerfield who has contracted with Northwestern University for a person to be in the Department as Director of Administrative Services. The Director's responsibilities include planning activities. This alternative, along with several others, are discussed in Chapter IV.

3. Commissioned personnel in the planning position were usually involved in operational planning while civilian planners were involved in systems planning.

The two projects with commissioned personnel as planners were Downers Grove and Zion. In Downers Grove, the planner was a Lieutenant who had on-going activities of a) developing operational plans intended to attack a specific criminal activity, b) planning target incidence and selective enforcement projects, and c) supplying data for operational activities. In Zion, the major activity under the grant was implementation of a team policing project. The Lieutenant who headed the Operations Division was also the planner under the grant.

This situation can be contrasted with the projects in Lake Forest, Kane County, and Deerfield. In Lake Forest, the main project was the development of what is usually called a Management By Objectives system. The planner was a civilian systems analyst who designed and then programmed a completed system for the Department. The analyst was never involved in operational planning.

In Kane County, the first civilian analyst conducted a series of needed studies of which the two major were patrol allocation and 911 communications research. In both studies, the analyst provided information on several key topics -- time response, officer's workload, communications room layout, computerized patrol activity report, and records system inadequacies. The results of these studies served as the basis for many operational changes.

These experiences clearly indicate the differences in how commissioned and civilian personnel are used. The choice of whether to use commissioned or civilian personnel depends on the anticipated activities of the projects.

4. Planners and analysts were usually involved in one-time planning efforts under the grant projects.

In Chapter II, each activity was classified as to whether it was one-time, limited, or on-going. Over all the projects, there were 176 activities of which 98 (55.7%) were one-time efforts. Of the 98 one-time activities, 23 (23.5%) were minor, 51 (52.0%) were significant, and 24 (24.5%) were major. The planners and analysts were, therefore, involved in many one-time efforts that consumed considerable amounts of time.

5. Grants of 18-24 months are sufficient to establish the planning process in police agencies.

The planning process was not established in any of the nine projects. Deerfield was the only project to have received three years of funding at the time of the evaluation. The Chief in Deerfield has established an alternative mechanism to accomplish the planning activities. If the grant had ended after two years, this mechanism would probably have been established earlier.

Lake Forest received two years of funding and did not seek third year funds. While the main activity in the Lake Forest project was not completed during the first year, it was well along the way and would probably have been completed by the city.

Based on what we have seen in the projects, there is no reason why the planning process cannot be established within two years within a small police agency. Chapter IV presents several alternatives for obtaining the planning function in a small agency. A two-year time frame is certainly sufficient to institute any of these alternatives. As also discussed in Chapter IV, key ingredients are a commitment by the Chief to planning and the delivery of training on planning and crime analysis subjects.

6. Most agencies did not know what to expect from the planning or crime analysis function that was being funded. The Chief of the agency usually defined what the unit was to do.

In the Champaign/Urbana project, key project personnel candidly admitted that they did not know what to expect from the crime analyst. There were indications that the same situation was true in other projects.

Without exception, the Chief in each agency defined what the unit was to do. Yet, in most projects, the Chief had only a vague idea of what should be accomplished. It was discovered that often the actual grant application and, therefore, the "plan of accomplishment" was written by regional planners.

This problem is related to the previous discussion on the need for training. The training is needed on two levels. One level is for command personnel to understand the basic principles of planning and how they should be instituted in their department. The second level is for planners and analysts to learn some techniques applicable to their functions. We found that some individuals were hired because of their familiarity with police operations, but they lacked any formal training, especially in crime analysis. In at least two projects, personnel were promoted to the analyst position simply because they were the only persons remaining on the project. These persons were familiar with project activities but were in great need of formal training.

D. ANALYSIS OF IMPLEMENTATION EFFORTS

Table 16 reveals a total of 176 different activities that can be defined from grant applications, reports or on-site observations. Of these, 85 were identified in the grant applications and 91 activities were developed after the projects became operational. This latter number, together with our personal observations of local grant administration, provides the basis for the following two assumptions.

TABLE 16

SUMMARY COMPARISON BETWEEN PROJECT ACTIVITIES
PLANNED AND IMPLEMENTED

Agency	Total Number of Activities De- fined in Grant Applications	Total Number of Activities De- fined by reports or on-site observation	Total Activities	DEGREE OF IMPLEMENTATION									
				Number Completed		Number Partially Completed		Number Discontinued		Number Abandoned		Percent Discontinued or Abandoned	
				grant	other	grant	other	grant	other	grant	other	grant	other
Downers Grove	13	12	25	3	10	7	1	0	1	3	0	12%	4%
Zion	8	4	12	6	4	1	0	0	0	1	0	8%	0
Cahokia	1	6	7	1	5	0	1	0	0	0	0	0	0
"Locate"	20	9	29	2	8	3	0	3	1	12	0	52%	3%
Kane County	15	6	21	13	5	2	1	0	0	0	0	0	0
Danville	6	20	26	1	17	2	1	0	2	3	0	12%	0
Lake Forest	13	16	29	13	16	0	0	0	0	0	0	0	0
Deerfield	7	9	16	5	8	0	1	0	0	2	0	19%	0
Elgin	2	9	11	2	8	0	1	0	0	0	0	0	0
TOTALS	85	91	176	46	81	15	6	3	4	21	0	14%	2%

- Too often the grant applications do not give an accurate concept of what is to be accomplished. Often, the local agencies preparing the application (usually someone from a regional office actually writes the application), address the available funding category as described within the state plan. Once the funding is awarded, the localities pursue those activities which are of a real concern to them. Thus, the grant application serves as a funding conduit, but too often it does not serve as the program plan or guide.
- The fact that 14 percent of the grant application activities are ultimately abandoned compared to only 3 percent of the activities initiated after the grant is awarded (see the last column of Table 16) lends support to the above assertion. It also questions the degree of program commitment of the local administrators.

It should be noted, however, that the above statistics are somewhat skewed by Project LOCATE, which abandoned 55 percent of its activities. As described in Chapter II, Project LOCATE was a well planned project, but was evidently planned on the regional level with little actual commitment by the three jurisdictions involved. The lack of commitment has been manifested in many ways:

- Lack of proper supervision for the project manager.
- Lack of personnel commitment by each agency (none of the three agencies committed the manpower as promised in the grant application).
- Lack of commitment or desire to institutionalize the program so that it may continue after funding has expired.

Project LOCATE is obviously unique. Generally speaking, there has been a high degree of successful implementation of grant activities. As we again observe Table 16, we see that of the 176 total activities, 148 have been or are on the way toward successful implementation (those activities that are completed or partially completed). This is a successful implementation rate of 84 percent. However, implemented activities that were defined in grant applications account for only 35 percent of the total.

E. EFFICIENCY ANALYSIS

Table 17 analyzes the 148 "active" projects. In order to assess the data in Table 17, we used the definitions given at the beginning of Chapter II.

Table 17 shows that 66 percent (98 activities) of the total active projects were one-time in nature. Nine percent represented a "limited activity" or only peripheral involvement on the part of grantee persons, and 25 percent (37) represented "on-going" activities. Of course, it should be realized that many "one-time" activities contributed to major on-going projects.

Table 17 also shows that 24 percent (36) of the projects were relatively minor in nature, whereas only 9 percent (13) were considered as primary projects.

Tables 16 and 17 were developed to provide information on total activities rather than a direct comparison of grantees. The grantees should not be directly compared in these tables (in terms of total productivity) because of the varying lengths of grant periods. The purpose for this subsection is to provide some comparison data on total productivity between the grantees. While we are attempting to quantify overall productivity, much subjective analysis was incorporated in developing the base data. For example, the scope of effort of a particular activity was assigned after reviewing the products of a given activity and discussing the level of effort with the grantee. Since very little routine documentation has been kept on the activity level, the assignment to a given category is usually the "best estimate" of the evaluator.

In order to develop an "efficiency factor" we arbitrarily assigned weighted points to both the "tenure of activity" and "scope of effort" classifications:

	<u>Weight</u>
● Tenure of Activity	
One-time	2
Limited Activity	1
On-going Activity	3

AGENCY	TOTAL NUMBER OF ACTIVE PROJECTS (Total Projects Less Abandoned or Non-Functional)	TENURE OF ACTIVITY						SCOPE OF EFFORT					
		One-Time		Limited Activity		On-Going Activity		Minor Effort		Significant Effort		Major Activity	
		#	%	#	%	#	%	#	%	#	%	#	%
Downers Grove	21	13	62%	4	19%	4	19%	10	48%	5	24%	6	29%
Zion	11	9	82%	2	18%	0	0	4	36%	4	36%	3	27%
Cahokia	7	3	43%	0	0	4	57%	2	29%	3	43%	2	24%
"LOCATE"	13	5	38%	2	15%	6	46%	5	38%	4	31%	4	30%
Kane County	21	19	90%	1	5%	1	5%	3	14%	10	48%	8	38%
Danville	21	7	33%	4	19%	10	48%	4	14%	15	71%	2	10%
Lake Forest	29	26	90%	0	0	3	10%	6	21%	18	62%	5	17%
Deerfield	14	11	79%	0	0	3	21%	0	0	5	36%	9	64%
Elgin	11	15	45%	0	0	6	55%	2	18%	3	27%	6	54%
TOTALS	148	98	66%	13	9%	37	25%	36	24%	67	45%	45	31%

TABLE 17
SUMMARY REVIEW OF TENURE OF ACTIVITY AND SCOPE OF EFFORT

Weight

● Scope of Effort	
Minor Effort	1
Significant Effort	2
Major Activity	3

By multiplying the number of activities within a category by the weight of a category, we arrive at a number which we call the category value. Adding all category values gives a number we call the gross value. We then divide the gross value by the number of total activities that have been identified with a particular agency. This final number becomes our "efficiency factor".

Table 18 provides a summary review of our analysis. While the efficiency factors provide us with an appreciation for the overall level of effort, it does not provide us with an indication of the relative quality of effort nor does it associate grant costs with the level of effort.

As we review the table, we can determine that Downers Grove and Project LOCATE are on the lower end of the scale. Conversely, Elgin, Cahokia, Deerfield, and Kane County are all at the upper end of the scale.

Ironically, as we indicated in Chapter II, Kane County no longer employs a Planner/Analyst and withdrew its third year application for funding. The high rating received by Kane County is obviously due to the number and type of activities by the original Planner/Analyst.

TABLE 18
EFFICIENCY ANALYSIS

Agency	Gross Value	Number of Activities	Efficiency Factor
Downers Grove	80	25	3.20
Zion	41	12	3.42
Cahokia	32	7	4.57
"LOCATE"	55	29	1.90
Kane County	89	21	4.24
Danville	88	26	3.38
Lake Forest	118	29	4.07
Deerfield	68	16	4.25
Elgin	54	11	4.91

Mean: 3.56

*Activities and total months in operation are counted through May 1978 and include original grant periods plus any extensions

CHAPTER IV
PROGRAM AREA GUIDELINES

A. INTRODUCTION

The purpose of this chapter is to recommend guidelines that will improve the potential for success in future funding insofar as improving planning or crime analysis capabilities. Section B discusses some alternative funding approaches that are not presently being followed within the comprehensive plan. Section C should be considered a guide to program development on the local level. It is based on the collective experiences of the agencies being evaluated.

B. RECOMMENDED GUIDELINES FOR FUTURE PROGRAM FUNDING

1. General

Without a doubt, funding police planning and crime analysis units is critical in maximizing the efficiency of police services. The funding category should be continued. We do, however, see justification for separating police research and planning funding categories from police crime analysis funding. Also, funding planning units is justified in only the "larger" of the small departments, at least as far as traditional funding practices are concerned. The following subparagraphs provide more detailed recommendations.

2. Crime Analysis Funding

As mentioned above, we recommend that a separate funding category be established for crime analysis. The present funding criteria, with no limitation on the size of the department, should be followed so long as an applying department can demonstrate a need for crime analysis and has the proper central support capabilities. While crime analysis can be considered an integral part of police planning, it is sufficiently specialized to warrant funding that will attract qualified persons to the position.

The definition of crime analysis varies greatly across the country. Prospective grantees should be required to document the intended organizational relationship of the crime analysis unit to the rest of the department's command and support staff. The mission and description of responsibilities for the proposed unit should be documented together with goals and objectives. These should all in turn be reduced to formal job descriptions that specify the qualifications necessary to perform the functions stated.

If a department is favoring assigning a sworn officer(s) to the position, it should show that the officer has the qualifications described in the job description; otherwise the agency should be required to hire for the position.

3. Funding a Police Planner for "Larger" Small Departments

During various stages of the four year funding for Police Planning and Crime Analysis Units, ILEC used the agency size as a funding criterion. While the criterion appears to have been flexibly applied, judging from the size of the agencies that have been funded to date, there was apparently preference given to the "larger" small departments, those with at least 50 sworn officers.

We recommend that a department size criterion be continued for research and planning grants. Departments of fewer than 50 sworn officers should not consider a full-time planner. Alternatives for smaller departments are discussed within subsection 4 below. A major decision that a police administrator must make is how much and in what detail the agency can plan without overburdening the other major agency functions. As we have said, we do not believe that the smaller agencies can justify a full-time planner after the expiration of funding. It is more important, therefore, that the smaller agencies receive training in principles of planning in order that they might organize themselves to be self-sufficient.

Further, it is doubtful that many departments with 50 to 75 sworn officers can justify a full-time planning position. ILEC should consider funding planning development programs whereby departments of this size are given the opportunity to develop the formal planning function. It would be prudent, however, to allow the agency to combine the services of the planner

with other related support functions, e.g., training or personnel. Combining the services of a planner with other technically specialized support functions, such as communications or records, should be avoided.

In line with the National Advisory Commission's recommendations, agencies of 75 or more sworn officers will usually have the need and justification for a full-time planner. It is therefore our recommendation that the ILEC policy be changed so that full-time planning positions would be funded only in agencies having at least 75 sworn officers.

Another theme we have often repeated is that few planning grant recipients demonstrated any real knowledge of planning principles. The general procedure was for the Chief to assign tasks that needed to be done. Generally speaking, these tasks were critical to the department and effected needed improvement, but they did not necessarily improve the planning process or planning capabilities of the department. For future funding of research and planning and to generally improve police planning throughout the State, we make the following recommendations.

- a. Training. ILEC should promote, and support with the necessary funding, an annual seminar for police executives on the principles of planning. The seminar should concentrate on developing planning policies within the department; definition of responsibility for certain aspects of planning; coordination of planning; and identification of feedback mechanisms for evaluation purposes.
- b. Executive Qualification. A condition of grant award should be the successful completion of the above described planning training sessions by either the Chief or the Command staff member to whom the planner will report. Allowances should be made for completion of the training within the first year of grant award if the training was not available previously.
- c. Planning Policy (Intra-Department). The grant application should contain an outline of a Planning Policy (plan for planning). The Planning Policy should address the following points at a minimum:
 - Organization. How will the agency be organized to carry out the planning function? The planner should have no more than one person in the chain of command between him/her and the Chief of Police.

- Responsibility. The applicant should demonstrate knowledge of the need for central coordination of planning without robbing the management responsibility for planning from the other functional units of the department. The planning policy should delineate the responsibility for various types of planning, e.g., tactical, operational, management, etc.
- Coordination. The main responsibility of a centralized police planner is to coordinate the planning efforts of the department. How will the coordination be accomplished?
- Job Description and Position Title. The applicant should have the planning function sufficiently well defined so as to be able to describe the planner's specific responsibility in a job description. The job description should be complete enough so as to provide a format for personnel performance evaluation and review.
- Problem Identification and Prioritization. There is a general need within current-day law enforcement to conserve resources and avoid the shotgun approach to problem solving. An applicant agency should be able to define its needs, group them by category, prioritize them, and assign them to the proper departmental unit.

d. Extra-Departmental Planning. Planning and coordination outside the police department is woefully neglected throughout the nation. Agencies qualifying for the police planning grant should also be encouraged to develop a cooperative planning policy with other governmental and citizen groups.

We believe that the adoption of the above funding procedures will ensure that grantees organize their approach to the planning effort as opposed to attacking planning on a day-to-day, task-by-task basis. As the National Advisory Commission on Standards and Goals pointed out:

The police agency that plans effectively generally operates efficiently and rewards its community with effective and dependable police service.

A police agency that fails to plan ahead is forced to operate from day to day, adjusting to new demands as new demands arise, but never undertaking long range projects to upgrade police service. The agency may appear effective, but could be much more effective if it charted its course. Such an agency delivers less than maximum police service and shortchanges its community.³

³National Advisory Commission on Criminal Justice Standards and Goals, Chapter 5, "Planning and Organization," Government Printing Office, Washington, D.C., 1973, p. 101.

4. Programs for Funding Smaller Departments

In the State of Illinois, there are 200 police departments with a total of 4,581 sworn officers. These officers serve a population of 2,974,889 citizens. In addition, there are 43 sheriff's offices with 984 sworn officers that serve a total population of 887,196 persons. In total, there are 243 agencies with a combined strength of 5,565 officers that provide law enforcement services to almost four million residents of the State.

In the previous section, we recommended that criteria be established to fund positions for full-time planners only in departments of 75 or more sworn officers. This does not mean that we feel the smaller departments should be abandoned.

This section proposes alternative funding programs for smaller agencies, programs that should have more of an ultimate impact than traditional step-down or phased programs. The recommendations of this section are based upon three premises:

- Small police departments have the same basic problems facing larger departments and need the same expertise to solve them.
- Small police departments should have somewhat the same opportunity for obtaining Federal grant monies as larger agencies.
- Departments of less than 75 officers cannot afford to have a full-time planning specialist within their ranks.

There are five alternatives for smaller agencies to develop a planning function.

a. Training. Training in planning is even more important to the smaller agency than to the larger agency. The executive training seminar described earlier should have special sessions devoted to organizing the planning efforts of a smaller agency.

In the smaller agencies, each officer has greater opportunity for direct input into the planning process than in larger agencies. The type and degree of planning will vary by position, but the concept of planning should be instilled from the time a new officer enters recruit school.

The State-required police officers standard training program should be reviewed to ensure that maximum attention is allocated to planning. The National Advisory Commission on Standards and Goals has stated:

Incorporating into the recruit training program a course in basic planning techniques (and arranging comparable in-service courses for those past basic) should be a step toward increasing effectiveness.⁴

Continued training for in-service personnel is especially important. The Advisory Commission goes on to explain:

Personnel assigned to specific planning responsibilities, even though they meet the agency's minimum qualifications for these positions, cannot be expected to perform effectively without adequate advanced training. This training should include courses in planning methodology and research techniques. Subjects should include systems theory and technique; data collection and processing; determining criteria for evaluation; identifying problems, objectives, or alternatives; reducing risk in decisionmaking; and activity scheduling, resource allocation, and program control.

Most police agencies do not have the expertise to conduct the necessary advanced training. Educational institutions are the most logical and usually the most economical source for this type of training on an on-going basis; but where a new unit is established, particularly if all personnel are to be trained as a unit, consulting organizations may be in a better position to adapt the training to the specific needs of the police agency.

The remaining recommendations incorporate training with other direct planning services.

b. Contractual Planning Assistance from Larger Agencies. ILEC should consider funding requests from small departments for contractual planning assistance from larger departments with well organized and established planning units. Care should be taken in this regard since large agencies, simply by virtue of size, do not necessarily possess the planning expertise that would be beneficial to smaller departments.

⁴Ibid., p. 120.

Contractual planning, however, would be especially beneficial in specialized situations, for example, where the smaller agency wants to upgrade its communications system or to revise its records procedures. A larger department that has recently undergone such upgradings, but with the benefit of an in-house planning staff to accomplish the task, would be in a good position to provide technical assistance to the smaller department in order to lead it around all the pitfalls.

In this same vein, smaller departments can benefit from the experience of larger departments in mutual aid agreements, disaster planning, information sharing, etc. ILEC should consider ways to make funds available to foster inter-agency agreements and joint participation in areas such as fiscal planning. A joint purchasing agreement can be especially beneficial to a smaller agency with limited resources.

c. Technical Assistance from Government Agencies. Specialized planning assistance is often available from State and Federal Government agencies. Programs such as LEAA's various technical assistance projects, Search Group, Inc., and Association of Police Planning and Research Officers (APPRO) all maintain advisory type planning assistance for local agencies. These services should be well publicized and smaller agencies especially encouraged to take advantage of the programs offered.

d. Contractual Planning Assistance from Consultants. A direct contract with a consultant can provide a local agency more control over the planning process than simply receiving advice or technical assistance as described above. There are several ways an agency can contract for direct services, three of which are described below:

1. The Individual. Although it was not planned within their grant applications, the Lake Forest experience provides a model of what can be accomplished with individual contractual services. While under the grant, the Lake Forest planner/analyst was considered to be a city employee rather than a consultant, but the principle remains the same.

Lake Forest defined a need for upgrading the personnel review and management information system. ILEC awarded the grant and Lake Forest hired a competent, experienced individual. The individual assisted the city in developing the system it wanted, trained an administrative aide in maintenance of the system, and then left the agency. He left behind, however, the management and administrative tools to plan and implement an MBO program within the department.

We believe it possible to create alternatives to the traditional grant procedures of a three year step-down funding period with the "assumption" that the local department will maintain the program as funded. A more realistic alternative for the smaller department would be an 18 to 24 month grant for a respectable salary for an individual with credentials unique to the department's needs. The individual would be used strictly for research and development to establish either planning or analysis procedures within the department. Once systems or procedures have been developed, the agency could then devote the manpower necessary to maintain the programs. Most likely they would not require a full-time person.

2. Universities. The Deerfield "exchange" program provides a model of how small departments can gain from the planning and research experience of an academician. The Deerfield concept was explained in depth in Chapter II and will not be repeated here, other than to recommend it as a viable program to be considered for grant funding. There are certainly enough universities in the State of Illinois with trained research and planning personnel in criminal justice to make this a worthwhile endeavor. Again, just as in selecting and hiring an individual from the outside, care must be taken in establishing the duty requirements for an exchange person.

Of course, universities can also serve as a source for specialized technical assistance or training.

3. Non-Profit and Profit-Oriented Criminal Justice Consultants. Other than hiring consultants to conduct state-wide training, the routine use of either profit or non-profit organizations is usually economically prohibitive

for the smaller agency. There are often instances, however, when it is practical and beneficial to hire professional consultants. Occassionally, a consultant firm specializing in criminal justice will be in a position to provide experience and national knowledge to a given problem area. The end result may be less costly than other alternatives.

e. The "Circuit-Riding" Planning Concept. It may be noticed that thus far we have not discussed regional planning. We have avoided recommendations for regional efforts because we have sensed that many chiefs are dissatisfied with present regional concepts. While there is probably a very good potential for improving local planning through regional efforts, by its very nature, a regional planning unit cannot always be responsive to specific departmental problems. Such a unit must concentrate on (1) regional problems, (2) problems facing more than one department, and (3) problems having a priority based on consensus. In order to be effective, a small department needs more specific attention, almost daily involvement in formal planning directed at their problems.

The most innovative and very possibly the most viable alternative for providing planning assistance to the small department could be the "circuit-rider" concept:

In Minnesota, most state agencies have in the past refrained from providing grants to smaller cities because of the lack of management capability to handle the grants. The Redwood County project has overcome this problem, with grants sometimes given to all five cities jointly with one serving as the contractor.⁵

The Redwood County project described above is one project of several that have come to be known as the "circuit-riding" city manager concept. The Redwood County project consists of five small towns that have banded together to hire a professional manager because they realized they needed professional management assistance but were unable to afford it as individual municipalities.

⁵Jon, Elarn, "The Circuit-Riding Manager," Public Management, April 1978, p. 4.

This concept has validity for many smaller agencies that cannot afford a full-time police planner. We recommend that ILEC explore the possibility of establishing a funding category for such a concept. Particular care must be taken to ensure that the program is not simply a spin-off of a regional planning effort. For such a concept to be effective, a firm schedule would have to be established. The planner may spend from one week to a month within each agency before he rotates to the next agency.

The main functions of this professional circuit-riding planner would be to provide management and planning training for the local agencies, to assist them in the coordination of their planning efforts, and to help them establish their individual internal planning policies. The rotation concept, of course, would not be conducive to minor projects or tasks. The circuit-rider's main utility would be to organize in order to accomplish these tasks.

It appears that commitment on the part of the local jurisdictions is the key to a shared program. In citing some of the obstacles that have confronted the above programs, Mr. Elarn points out:

In programs such as these, the planning district has generally applied for a grant, most often from the Intergovernmental Personnel Act or the HUD 701 Planning Program. An outreach network of cities is developed (each circuit appears to be a bit different), and together they hire a person to work with the cities.

This program approach differs from that of the true "circuit-rider" in several ways. First, the cities themselves often do not make a significant financial commitment to the project. This lack of a vested interest in making the project succeed becomes crucial when the grant runs out, as most eventually do. The circuit then either breaks up or is reshaped, losing any sense of momentum that had been gained.

Again, we believe that this concept is valid and innovative; as such it is worthy to be established as an experimental funding program to improve the planning capabilities, thereby upgrading the delivery of police services of small agencies.

C. RECOMMENDED GUIDELINES FOR THE DEVELOPMENT OF A PLANNING POLICY ON THE LOCAL LEVEL

Chapter V of this report provides a literature review of the state of the art for police planning. Within that chapter, several references are made to the various models for developing the planning function. One particular source that was quoted recommends the use of planning teams, for example. Ultimately the organization of a department will play a major factor in determining what the best model is for that agency. Additionally, in Chapter V, we provide several guidelines to police planners and models for planning and implementation are reproduced in Appendices A and B. The purpose of this section of the report is to provide guidelines on the development of a "planning policy" or "plan for planning."

1. Developing the Policy

The Chief must bear the responsibility for developing and implementing the planning policy. In larger organizations where a planning position is warranted, the policy may be prepared by the planner under the guidance of the Chief. Basically, the planning policy should address:

- The different types of planning.
- The responsibility for each type or facet of planning.
- Guidance as to how much time and in what detail the planning is to be accomplished at various operational and organizational levels.
- A statement of mission and departmental goals and objectives.
- The level of coordination required to implement plans. Check points for feedback and evaluation are essential to ensure conformance with the overall department goals and objectives.
- Definition of planning cycles.

2. Planning for What and Whose Responsibility

a. The Chief of Police has ultimate responsibility for the development of the planning policy. Generally the Chief will retain the responsibility for the following planning areas by:

- Establishing the departmental goals and objectives (the actual procedure of development may vary depending on management style).
- Management planning
 - Organizational
 - Manpower
 - Fiscal
- Long-range forecasting in conjunction with goals and objectives.
- Establishing departmental policies and procedures.

b. Division or major unit commanders are generally responsible for operational planning such as:

- Developing work plans.
- Establishing unit objectives (ultimately with input to departmental objectives).
- Defining resources and needs.
- Developing procedures.
- Assisting in development of tactical plans as required and as related to their particular organizational area.

c. Level of execution for the various plans should be defined in the planning policy detailing responsibility for implementation.

2. Commitment

The level of commitment will, for the most part, be determined by the size of the agency and by level of organization within the department. Ultimately, police managers are responsible for planning within their own area. However, the manager will often find it necessary to delegate planning functions to

others. The degree of delegation, obviously, depends upon the level of management. A Chief of a larger department will, of course, delegate much of the responsibility for coordination of the planning to a designated planner. But what of those agencies which cannot justify a full-time planner? In that case the Chief must retain the actual function of a planner and delegate to the major unit commanders only those areas under their direct responsibility. In smaller departments, where the Chief bears the full responsibility, it may be advisable to allocate specific time periods to the planning function on a weekly basis. Table 19 illustrates a diagram of planning responsibility of commitment.

3. The Planning Process

The process of planning should be defined within the policy for the benefit of all departmental managers, e.g., problem identification, prioritization, assignment of responsibility, development of detailed task statements, identification of resources, and establishment of time schedules.

4. The Planning Cycle

A major key to successful coordination of departmental planning efforts is the publication of a planning schedule or cycle. Every police manager from the Chief down to the lowest officer with any departmental planning responsibility should have a thorough understanding of the planning cycle. Elements of the planning cycle should include:

- Strategic and Long-Range Planning - on-going, not restricted to time constraints -- should be reviewed at least quarterly.
- Formal goal setting - an annual event in conjunction with either the fiscal or calendar year -- should focus on goals at least one year in advance.
- One year plans should be prepared sufficiently far enough in advance to allow implementation within the next budget year. Many departments require the organizational units to submit one year plans by July. They are reviewed by the Planning Committee by September, revised as needed, and submitted to the local government by the first of the calendar year.

TABLE 19
PLANNING RELATIONSHIPS

	Chief	Commanders/Supervisors	Execution
Commitment	up to 12 hours/week (away from department in 3-4 hour blocks)	8 hrs per week 2-3 hour blocks	varies by assignment
Type of Planning	<ul style="list-style-type: none"> ● Dept goals and objectives ● Long Range Forecasting ● Policy Development sensitive issues ● Management Planning <ul style="list-style-type: none"> - Organizing - Manpower - Fiscal ● Coordination of Depart- ment Planning 	<ul style="list-style-type: none"> ● Operational Planning Work Plans <ul style="list-style-type: none"> - Objectives defined - Resource needs established - Procedures developed ● SOP's ● Coordinating Planning on the unit level 	Tactical Planning <ul style="list-style-type: none"> - Defined by local needs

- Budget reviews should be formally incorporated within the planning cycle -- should be held monthly.
- Performance review could be held jointly with budget review but it is suggested that it be formally scheduled at a different time during the month. Performance review will focus on the status of the projects and on goal achievement.

CHAPTER V
PLANNING, RESEARCH AND CRIME ANALYSIS
WITHIN THE LAW ENFORCEMENT SECTOR -
A STATE-OF-THE-ART REVIEW

A. INTRODUCTION

The purpose of this chapter is two-fold. First, we separate the function of planning from crime analysis. We then review each of the functions in an effort to derive a workable definition, at least in the terms of the theorists. As we will see in the final analysis, the function of planning or analysis is, in the smaller departments, defined by the Chief of Police.

In conducting this exercise we will provide a mini "state-of-the-art" review of each of the functions. Secondly, and most importantly, the review provides a frame of reference upon which our assessment of the nine projects was based.

We will first begin our review with the planning and research functions; we will then review crime analysis, and finally, try to define the parameters for the co-existence of the two functions.

B. PLANNING IN THE POLICE ORGANIZATION, SOME DEFINITIONS AND CAVEATS

1. The Extent of Planning in the Current Day Law Enforcement Organization

Gourley addresses the issue of planning in a police organization as "a primary requisite to all other managerial functions."⁶

⁶G. Douglas Gourley, et al, Effective Police Organization and Management, Volume I, as submitted to the President's Commission on Law Enforcement and the Administration of Justice, 1967, p. 1069.

He quotes the 1931 National Commission on Law Observance and Enforcement Report on Police where it suggests that:

Executive capacity of the very highest degree should be demanded and universities should vie with each other in turning out from their institution men adequately trained to serve their country as efficient police leaders.⁷

As we can see, planning has long been held as a critical area in police management.

Of special interest are the results of a study reported by Leonard in which 45 cities in population groups of 100,000 and above responded to a survey of planning activities.⁸ Less than half the respondents indicated that the planning function was not formalized by a special unit within the agency. Gourley, however, explains that the general trend is toward the formalization of planning by a special unit as the department size increases. He states that "A general rule for the specialization of this function is when it far exceeds the capacity of any single executive or manager."⁹

The 1962 survey may have been an exaggeration of the actual number of functional planning units. Hoy warns that "the presence of a box on the organization chart does not mean that the agency has really made a commitment to research and plan. The fact is that very few departments have made such a commitment." Too often, Hoy explains, "the planning is attempted without the benefit of research; or planning is decentralized to the field and administrative units with little or no coordination and mutual benefit; or

⁷ National Commission on Law Observance and Enforcement, Report on Police, (Washington, D.C.: United States Government Printing Office, 1931).

⁸ V. A. Leonard, Police Organization and Management, Second Edition, (Brooklyn: Foundation Press, 1964), p. 173.

⁹ Gourley, op. cit., p. 1038.

the planning unit is understaffed, the planning staff are not qualified or are not trained; or the staff are not allowed to make recommendations and do not really plan."¹⁰

Unfortunately, we have not progressed very far when we compare the needs defined in 1931 by the National Commission on Law Observance and Enforcement to the statement issued by the National Advisory Commission on Criminal Justice Standards and Goals in its 1973 report on Police:

Extensive planning, administrative as well as operational, is one of the most critical needs of the police today. There are not many police chief executives who disagree with this, but few have taken positive steps to encourage or implement such planning. This failure puts the burden on individual subordinates who must plan for their own operations without administrative direction and support usually on a crisis basis.

Additionally, the failure for the police chief executive to provide for planning indicates to subordinates that he considers planning to be unimportant, or that he is not interested in how they perform their work. The first tends to encourage the subordinate to adopt the same attitude toward planning; the second lowers morale and efficiency. Neither contributes positively to the effectiveness of agency operations.

In summary, the need for planning in law enforcement has long been recognized as a critical issue. Currently, however, we are still in the early stages insofar as the actual development and implementation of planning procedures are concerned. Our review of the literature reveals that a particular deficiency lies in the area of management's failure to comprehend the significance of different types of planning and the failure to provide adequate training for personnel associated with the planning function.

¹⁰Vernon L. Hoy, "Research and Planning", Chapter 18 of Local Government Police Management, International City Management Association, 1977, p. 367.

2. Definitions of Research and Planning in Law Enforcement

There is no standard definition of planning. Police scientists create new definitions within their various publications. For example, Gourley states that:

Planning is the working out in broad outline of the things that need to be done and the methods for doing them in order to accomplish the purpose set for the enterprise. It involves a forecasting of the future problem and a scheme for meeting it.¹¹

Whisenand and Ferguson state that:

Planning is a dynamic process that involves a number of activities and methods for generating plans that provide an organization with sustained renewal and change in terms of more effective goal accomplishment.¹²

Most authors define research and planning as necessary supporting functions of each other. Gourley explains:

Research is a tool for acquiring knowledge which makes progress possible. Planning is the process of developing projects for getting things done. The two activities are complementary as the former involves the definition of problems and the gathering and analysis of facts, while the latter includes the formation and implementation of proposals based on the facts. In order to meet their obligations in a rapidly changing society, law enforcement agencies must make full use of (both) research and planning.¹³

Hoy describes research as the "careful, systematic study and investigation of some field of knowledge", while simply defining planning as "deciding in advance what is to be done, by whom, when, and where."¹⁴

¹¹Gourley, op. cit., p. 1039.

¹²Paul M. Whisenand, and R. Fred Ferguson, The Managing of Police Organization, (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1973), p. 93.

¹³Gourley, op. cit., p. 1037.

¹⁴Hoy, op.cit., pp. 367 and 371.

Earlier, we quoted Gourley's definition of planning where he stated, in part, "it (planning) involves a forecasting of the future problem and a scheme for meeting it." Hoy embellishes this definition when he explains that "Research provides facts, and facts help identify problem areas."¹⁵ Interestingly enough, one of the greatest failures of modern police executives is their inability to be able to define problem areas in advance. Consequently, too many police executives must resort to crisis management.

Since research involves the identification of problem areas, it is worthwhile to review the functions of research separately from planning. In order to conduct our review, we will again return to Hoy who breaks research down into three types or categories: fact finding research; logical reasoning research; and complete research.¹⁶

Fact-finding research refers to the production of a record of facts relevant to a particular situation of concern or interest to management. An example of fact-finding research may be the compilation of statistical data relating to the occurrences of a specific crime by time of day and day of week, or geographic area within the community. The purpose of fact-finding research can obviously help management decide what enforcement action is necessary.

Logical reasoning research is simply the application of good judgment, common sense, education and prior experience to the solution of a problem. Logical reasoning is the mental process often conducted in the absence of facts.

Complete research combines both fact-finding and logical reasoning. This is often referred to as completed staff work. Complete research involves the systematic approach to the definition of problem areas and recommendations for solutions.

¹⁵Ibid., p. 368

¹⁶Ibid., pp. 368-370.

Returning to the definition of planning, most authors divide the planning function into informal and formal planning. Informal planning usually refers to the mental consideration of a problem. Most often the informal plan is directed toward an immediate result.

Formal planning is often divided into either short range or long range planning. Regardless of whether the planning effort focuses on a short range or long term problem, there are four basic categories of formal planning.¹⁷

- Operational Planning
- Administrative Planning
- Procedural Planning
- Tactical Planning.

Regardless of the type or category of planning, a plan is a logical process. There is a need, therefore, for a planning policy or a "plan to plan." O.W. Wilson indicates that neglect in planning is usually evidence of the lack of professional knowledge of what and how plans should be developed.¹⁸ The formal planning function of a police department can be considered effectual only as it becomes an integrated system for decision-making and ultimately establishes the framework for the activities of the organization.¹⁹

Whisenand and Ferguson recommend the "planning teams" approach to establishing the process or "plan for planning."²⁰ Under the team planning approach, the department is divided into planning teams with the number of teams determined by the size and organizational structure of the department. Generally, one team acts as the catalyst and supervises the planning efforts of other teams. The lead team members will each have responsibility for serving on

¹⁷Ibid., p. 374.

¹⁸O. W. Wilson, Police Administration, 2nd Edition (New York: McGraw-Hill Company, 1963), p. 84.

¹⁹Whisenand and Ferguson, op. cit., p. 95.

²⁰Ibid., pp. 97-98.

one of the other teams. The overlapping team membership on the part of the lead team facilitates coordination in the total planning effort. Obviously, the lead team members should be members of the department's research and planning staff if the department is so organized.

No matter what method or process we choose to perform planning, the fact that a police department must have a plan for its planning to be effective is a necessity. Too often departments define the need for planning and request funds for additional manpower to perform the planning, assign someone as a planner or analyst and then leave the planner without a means of implementation. It should be remembered that planning is an useless unless the plan is properly implemented.²¹ For this reason, we are reproducing in Appendix A the planning/implementation model as developed by LeBreton. A model of management practice and its relationship to the planning process is provided as Appendix B.

While it is essential to have a process for planning, the police executive must use great care in determining what method is best for the department. We quoted Gourley earlier when he indicated that specialization in research and planning is usually a function of the size of the department. The following quote from Gourley embellishes upon specialization in planning:

Specialization in research and planning becomes necessary when the duties of the executive exceed his capacity because he lacks necessary time or energy or because his planning duties require specialized knowledge which he does not possess; and when delegation of planning activities to operating personnel is not feasible because (a) uniformity or coordination of action among several operating units is particularly important; (b) economy or effectiveness can be increased by assigning the work to a specialist; or (c) operating subordinates lack the time or ability to do more of their planning or to work effectively with less supervision.²²

²¹A planning implementation model as developed by LeBreton is discussed by Gourley in Effective Police Organization and Management, Volume IV (p. 1042), here he discusses the planning spectrum in terms of three basic processes: the planning process; the implementation process; the dimension process, and the impact of dimension of planning on the other processes. The planning/implementation model is reproduced as Appendix A to this report.

²²Gourley, op. cit., p. 1065

Specialization can, and usually does, increase the administrative expense as it adds to the complexity of organizational relationships. The question the Chief must always consider is whether such specialization will repay the additional expense as well as offset other possible disadvantages. For example, in addition to the expense of the increased personnel, it is important to consider the necessity of modifying the organizational structure to set up records, procedures and communications which will be useful and necessary to the planning function.²³ McDonell suggests a number of specifics that the police executive should consider:

1. The chief of police must emphatically indicate his commitment to the research and planning function.
2. The head of the research and planning unit must be of sufficient rank to hold his own in staff meetings.
3. The Research and Planning Unit should be at least a subfunction of the chief, or a strong deputy chief.
4. It should be staffed by men capable of collecting and analyzing facts, and presenting them clearly.
5. Command personnel must be required to participate in the planning process.
6. In any specific department, the planning unit must be organized to meet the unique planning problems in that department. Specialization in planning should not be done because it is the popular thing to do, and we should look at other agencies for suggestions rather than models.
7. The chief of police must sell the concept of change to his subordinates.²⁴

Finally, we refer the reader to Figure 2 which provides a series of questions that the executive should ask about planning and the "plan to plan."

²³Ibid., p. 1065.

²⁴McDonell, R. E., "Police Planning", International Business Machines Corporation, 1965.

FIGURE 2

QUESTIONS AN EXECUTIVE SHOULD ASK HIMSELF ABOUT PLANNING *

Key Questions Guiding the Extent of Planning

Single-Use Plans (Programs, projects, detailed specifications, schedules, and the like)

1. Will the plan help to get the right man at the right place at the right time, adequately supplied with instructions, materials, and equipment?
2. Will the plan improve coordination of several activities?
3. Will planning lower costs or increase effectiveness of the activity, through
 - a. anticipating trouble, and
 - b. developing more efficient methods?
4. Will planning ease the load on hard-worked executives by
 - a. permitting more decentralization of authority to act, and
 - b. providing guides for use in control?
5. To what extent is detailed planning warranted by the reliability of forecasts of operating conditions?
6. Will planning in advance lead to unwise commitments?
7. Will executives continue to be alert to new conditions and quick to adapt their actions to them?
8. Is the activity important enough to warrant formal planning? Will the improvement in results be worth more than the added expense involved in additional planning?
9. Is there time for detailed planning, or is prompt action more important?
10. Will the planning capitalize on the abilities and ideas of individuals throughout the enterprise and build morale?

Standing Plans (Policies, standard methods, standard procedures, and the like)

1. Can administrative work be simplified by adoption of plans that will be used over and over again?
2. Will efficiency be improved by intensive study to discover the "one best way," and by insistence on the use of such standard methods and procedures?

FIGURE 2 (cont'd)

3. Is uniformity of action important, and will standing plans help to achieve it?
4. Will standing plans ease the load on hard-worked executives by
 - a. permitting more decentralization of authority to act, and
 - b. providing an established behavior pattern to use in appraising action of subordinates?
5. Will use of standard methods simplify training and permit use of less experienced workers?
6. Is the repetition in operations significant enough to justify the effort involved in making standing plans?
7. Can operating conditions be controlled closely enough to make detailed standard methods feasible?
8. Will the expense of preparing the plans and enforcing them more than offset the benefits?
9. How serious is the inflexibility that will arise? Can provision be made for prompt modification and exceptions when they are needed?
10. Will insistence on standing plans have a bad effect on individual initiative?

Goals (Objectives, missions, deadlines, performance standards, and the like)

1. Are the efforts of executives ineffective due to lack of clearcut objectives?
2. Can plans be dovetailed more easily by identifying goals, sub-goals, and sub-sub-goals?
3. Will the planning process be made easier and more reliable by development of many detailed standards which can serve as building blocks in programming?
4. Will activities that do not contribute significantly to basic objectives be recognized and curtailed?
5. Will personal incentive be improved by providing standards of achievement?
6. Will control activities be more realistic and effective by closely relating planning with control standards?

FIGURE 2 (cont'd)

7. Will prediction and internal control be reliable enough to make the goals really valid?
8. Will the benefits of having clear goals be greater than the added expense of preparing them?
9. Will the goals have to be changed so often that confusion and frustration will result, rather than improved morale?
10. Will the statement of detailed goals lead to unwarranted advanced preparation and reluctance to change?

*

Source: W.H. Newman, Administrative Action (Second edition, New York: Prentice-Hall, 1963), pp. 72-73, as extracted from Effective Police Organization and Management, Volume IV by G.D. Gourley.

C. CRIME ANALYSIS IN THE POLICE ORGANIZATION

1. General

The previous section discussed the need for planning for police on the local level. The purpose of this section is to do the same with the crime analysis function.

2. The Extent of Crime Analysis in Current Day Law Enforcement

The extent of the use of crime analysis beyond elementary tabulation and comparative techniques is difficult to clearly identify. When an inquiry is made as to whether an agency has a crime analysis component, the answer is frequently yes. However, closer investigation usually reveals little more than a function that prepares tabulations of incidents by type of crime and a comparative rate of annual increase. Obviously, many departments have a more developed program than that just described, but few have programs that might be considered as outstanding.²⁵

In 1976, LEAA requested the Westinghouse Justice Institute, through the Technical Assistance Program, to conduct a study of the availability of training in crime analysis procedures and the extent of crime analysis capabilities in departments throughout the country. The above paragraph succinctly defines the result of that study insofar as operational crime analysis is concerned.

The author of the report could not state why so many agencies responded affirmatively when asked about their analytical capability. He states, "Whether an issue of the definition and understanding of crime analysis, the knowledge that it is currently considered a measure of a modern and effective department, or yet some other reason cannot be ascertained."²⁶

²⁵Byrd, Bruce B., Identification of Crime Analysis Training Programs And Police Department Crime Analysis Unit Operations, Law Enforcement Assistance Administration Police Technical Assistance Report, Report Number 75-104, March 12, 1976, p. 3-3.

²⁶Ibid., p. 3-3.

Much of the problem concerning what crime analysis is can be traced directly to the fact that there is little formal training of a comprehensive nature provided in crime analysis. Concerning training, Byrd states:²⁷

. . . no offerings were found of training that was directed solely to the crime analysis process, as defined. Few significant courses were identified that included crime analysis per se as a portion of their curriculum. The Crime Prevention Institute located at the University of Kentucky, Louisville, provides a three hour segment. This segment is part of a seminar for law enforcement officers whose major concern is crime prevention. It is described as an introduction/orientation to the subject and its uses. No great detail is spent on specific analytical techniques. As can be assumed from the amount of time dedicated to the topic, the variety and depth of approaches to the subject are limited . . .

Byrd goes on to describe training in crime analysis at other institutions, including Northwestern University. The findings pertaining to Northwestern were typical of other similar programs:²⁸

Northwestern University is frequently mentioned as a possible source for crime analysis training. Examination revealed, however, that Northwestern has no such specific training and only offers segments dealing with statistics. These are available in the traffic and management information courses.

Since the TA study was completed in 1976, additional courses and seminars are being offered to fill this critical need. For example, both the IACP and Thereom Institute offer seminars in crime analysis throughout the country on almost a quarterly basis. Interestingly enough, some of the seminars have been cancelled because of lack of attendance.

We have noted a lack of understanding of the needs of crime analysis in various police departments across the country. This lack of attention to crime analysis is illustrated by the lack of direct reference to the need for analysis in most state publications of standards and goals. For example, the Standards and Goals Committee Report published by the Illinois

²⁷ Ibid., p. 3-1.

²⁸ Ibid. p. 3-1.

Association of Chiefs of Police²⁹ follows the national recommendation for the establishment of a "specialized unit" to provide support services and evaluation of geographic programs, and to support crime prevention. While it may be inferred that such a support unit would possess the analytical ability to define the crime problem, it is not addressed as such.

Further light on the "state-of-the-art" of formal crime analysis in police departments was recently produced by the National Evaluation Program's publication of Crime Analysis in Support of Patrol. A major result of the study effort was contained within the Foreward to the document:³⁰

The message of the study is clear: better understanding and coordination between the analysts and the departments that use the analyses is essential. The police officials polled in this survey acknowledged the value of crime analysis. At the same time, they were not convinced that the more sophisticated mathematical analysis techniques -- such as response force modeling and crime event predictions -- are superior to less sophisticated formulas. In fact, the study found that the more formal the analysis program, the more remote it becomes to practitioners and the less likely it is that the information it produces will be used.

A summation of the current state of training in crime analysis is provided in the technical assistance report previously cited:³¹

- Training: -- Sources of training for operational law enforcement agencies that are directed solely to the crime analysis process were found to be essentially nonexistent. A few training courses exist where crime analysis of varying descriptions is included as a one- or two-hour segment of a program having either a general or distinctly different goal. Also, elements or techniques of crime analysis are found as portions of training courses for other disciplines, where some of the techniques are common. But no offering was found currently available that provided in-depth training in crime analysis, either for law enforcement or planning agencies.

²⁹Illinois Association of Chiefs of Police, "Standards and Goals Committee Report", November 1977, Illinois Standards 3.1 and 3.2, pp. 59-60.

³⁰G. Hobart Reiner, et al, Crime Analysis in Support of Patrol, National Institute of Law Enforcement and Criminal Justice, Law Enforcement Assistance Administration, United States Department of Justice, August 1977, p. ix.

³¹Byrd, op. cit., p. 4-1.

- Existent Crime Analysis Operations -- Crime analysis of a sort has existed in varied types and processes for as long as have law enforcement agencies. However, it is concluded that most efforts to date have been very rudimentary and that the refining of techniques and the application of the art is yet in its infancy. Within the last three to five years, there has been a general enlightenment concerning the utility of crime analysis and the consequential interest in developing effective, working programs. Numerous agencies state that they are involved in a crime analysis program, but upon close examination, few can be described as being comprehensive or current, or having a sophisticated and effective program.

3. A Definition of Crime Analysis

Byrd defines crime analysis as³² "A set of systematic analytical processes directed toward predicting criminal trends (both individuals and aggregate situations) for the purpose of reducing crime in a systematic manner." The key to Byrd's definition is the term "predicting." This assumes that a crime analyst must employ analytical skills beyond the mere accumulation and tabulation of data.

Other sources have offered a range of definitions for crime analysis, depending upon the application: "In the narrowest sense, crime analysis is concerned only with identifying short-term patterns of criminal behavior or events and associated characteristics. In the broadest sense, crime analysis has been considered as the total process of management decisionmaking throughout the entire criminal justice system and related agencies."³³

Another source discusses the range of definitions but proceeds from the general to the specific:³⁴

Depending on agency goals, personnel training, and other factors, one might encounter as many definitions of the

³²Ibid. p. 2-1.

³³Reiner, op. cit., p. 1.

³⁴Richard P. Grassie, et. al., Crime Analysis Executive Manual (Preliminary Draft), Integrated Criminal Apprehension Program, LEAA, U.S. Department of Justice, April 24, 1977, p. 1-12, 13.

concept crime analysis as there are department engaged in such a program. In its broadest sense, crime analysis has been interpreted as occupying an integral part of the decisionmaking process for allocation and deployment of police resources.

In this case, allocation signifies the strategic assignment of personnel by function, geography, and tour of duty to deal generally with crime and other police responsibilities. Crime analysis in support of allocation decisions involves the systematic examination of distributions of crime, hazard, and service problems, all of which are eventually synthesized into workloads or utilization factors to determine manpower needs.

Deployment refers to the systematic examination of crime data to form the basis for decisions regarding the tactical movement and action of police personnel directed at specific crime problems. Crime analysis for deployment is, by design, oriented towards the identification of short-term crime problems. It includes the collection, collation, analysis, and dissemination of crime and suspect patterns in support of field operational elements.

In summary, there is no formal definition of crime analysis which can cover all situations; the final definition depends on agency goals and the needs of the department. Individual definitions of crime analysis are most often determined by the Chief of Police through local problem identification and as processes, programs and applications are defined and developed. For this reason, general review of crime analysis processes and applications is warranted.

The Mission, Application, and Procedures of Crime Analysis. Perhaps a more realistic way to define crime analysis is to describe its mission.³⁵

Mission: To provide timely and pertinent information relative to crime correlations, criminal activities and their interrelationship to provide a base of information which aids operational and administrative personnel in planning the allocation of resources for prevention and suppression of criminal activities and perpetration, for aiding in the investigation process, clearance of cases, recovery of stolen property and apprehension process.

³⁵Michael O'Neil, "Crime Analysis - A Neglected and Ill-Defined Process," California Law Enforcement, pp. 107-110.

In order to accomplish the above mission, there are four essential elements to the crime analysis process:

- Data Inputs
- Data Analysis
- Dissemination and Utilization
- Feedback and Evaluation.

Data Inputs. Most authors agree that the success of the crime analysis operation is focused on the ability of the involved personnel to establish procedures for the gathering of accurate and pertinent information. Three basic rules for data collection to effectively serve the crime analysis function are: 1) the data must be reliable and valid; 2) the data should be received not only on a timely basis but on a regular basis; and 3) the data should be complete and comprehensive (while maintaining its pertinency). The Crime Analysis Unit Handbook published by LEAA depicts data sources both from within the department (Figure 3) and from outside sources (Figure 4). This information is reproduced here for ease of reference for the reader.

Establishing relationships with other police units is not as easy as simply reducing the concept to writing. A well known caveat is stated in the prescriptive package on specialized patrol:

It is extremely important that specialized operations do not overlook the general patrol and investigative divisions as information resources. General patrol officers and investigators can provide a wealth of useful crime-related information to guide the deployment of specialized units. Unfortunately, however, in many departments there is a long-standing tradition which inhibits the sharing of information. Specialized units have often found that detectives are willing to provide information only on cases which are more or less played out, and that the negative feelings of patrol officers toward specialized units reduce their willingness to share information about their beats. This problem of cooperation and exchange of information between units can be at least partially overcome if specialized units and crime analysis personnel make a special effort to establish a close working relationship with the patrol force and detective division.³⁶

³⁶Stephen Schack, et. al., Improving Patrol Productivity, Volume II, Prescriptive Package, Office of Technology Transfer, NILECJ, LEAA, U.S. Department of Justice, July 1977, pp. 67-68.

FIGURE 3

Some Crime Analysis Source Reports by Department*

DEPARTMENT	REPORTS SUPPLIED
Communications	Complaint-Dispatch Reports NCIC/State Crime Data Teletype Reports and Requests
Patrol	Initial Crime Report Follow-up Crime Report Field Interrogation Reports Crime Against Person Report Crime Against Property Report Stolen Vehicle Reports Worthless Document Reports Arrest Reports
Detectives	Initial Crime Report Follow-up Crime Report Field Interrogation Reports Crime Against Person Report Crime Against Property Report Stolen Vehicle Reports Worthless Document Reports Arrest Reports
Special Units	Any of the Patrol or Detective Reports Special Crime Reports Crime Intelligence Reports
Records	Statistical Data Warrant Data Distribution of Department Crime Reports Teletype Reports
Administration	Statistical Data Special Crime Data

*Source: Police Crime Analysis Unit Handbook, LEAA Prescriptive Package, U.S. Department of Justice, November 1973.

FIGURE 4
 Outside Sources of Crime Analysis Information*

INFORMATION	SOURCE
Disposition Information	Sheriff's Office Prosecutors Courts Probation Corrections Parole
Crime Analysis Data	Pawn Shops Gun Registration Check Data Credit Card Data
Suspect/Known Offender Data	Sheriff's Office Other Police Departments Probation Parole State Police State Identification and Intelligence FBI
Vehicles of Interest Data	Sheriff's Office Other Police Departments State Police FBI National Auto Theft Bureau
Crime Analysis Report	Surrounding Area Police Departments and Sheriff's Offices

*Source: Police Crime Analysis Unit Handbook, LEAA Prescriptive Package, U.S. Department of Justice, November 1973.

Data Analysis. The main function of crime analysis is to identify crime and criminal activity patterns. Too often, however, crime analysts limit themselves to simply tabulating data or at best comparing crime to MO characteristics. The more efficient crime analysts will go beyond the stages just noted and identify future likely targets and suspects in order to provide assistance to operational units in devising surveillance and preventive tactics.

Recently, there has been much discussion among police scientists concerning the use of sophisticated modeling or predictive techniques. It has been stated that such techniques have not met expectations.³⁷ It is noted, however, that the literature contains many examples of how analysis and predictive capability in support of efficient police operations combine to produce tremendous effects since "efforts to make predictions can force crime analysis to attempt to achieve a high degree of specificity in their pattern and suspect-specific analyses. Little is lost if the predictions are inaccurate and much can be gained from attempting to make them."³⁸

While some would argue that inaccurate predictions result in the widening of the credibility gap between the support unit analysis function and the operational forces within a department, the risks are justified if implemented by experienced trained analysts and if the crime problem warrants the attention.

Dissemination and Utilization. Of course the collection and analysis of data is a futile effort if it is not properly used. The key to utilization is the proper identification of users and designing methods of dissemination.

³⁷Ibid., p. 73.

³⁸Ibid., p. 75.

The techniques for dissemination are numerous and will not be reiterated here.³⁹ However, the characteristics of efficient dissemination include:⁴⁰

- The information is produced in a manner that is easily understood.
- The information is current and in a form that can be referenced and updated easily.
- Credit is given for information for referenced purposes.
- Facts are separated from inference.
- Procedures are made for referring additional information on a given topic as it is produced and interest is expressed.
- Should allow some mechanism for feedback information.

Feedback and Evaluation. Obtaining feedback on how information is being used is absolutely essential to an on-going crime analysis operation. The existence of the crime analysis operation is to enhance the administrative and operational functions of the department. The effectiveness of a crime analysis unit will correspond directly to its ability to define user needs and establish efficient methods of disseminating valid data. The user needs analysis can be achieved through either a formal or informal feedback procedure.

Finally, in order to be effective, each crime analysis unit should have independent objectives. The objectives will, of course, facilitate the internal evaluation procedure. Figures 5 through 8 depict sample objectives for various departmental functions as given in a recent crime analysis seminar conducted by PMS.⁴¹

³⁹The Crime Analysis Unit Handbook referenced previously is a good source of dissemination techniques. Other potential sources are: Prescriptive Package on Specialized Patrol, Volumes I and II; National Evaluation Program, Crime Analysis in Support of Patrol; The Integrated Criminal Apprehension Program's series on crime analysis; all of which have been referenced within this chapter.

⁴⁰O'Neil, op.cit., p. 109.

⁴¹Two day crime analysis seminar presented by PMS to the Hampton, Virginia Police Department, July 18 and 19, 1977.

FIGURE 5
CRIME ANALYSIS IN SUPPORT OF FOLLOWUP INVESTIGATIONS

Sample Objectives

- To identify reported crime having similar modus operandi (e.g., trademarks, etc) as those of the arrested person, thereby assisting in case clearances.
- To identify known offenders who have similar modus operandi as those appearing on a crime report, thereby providing investigative leads.
- To aid in case assignments to investigators by matching cases with similar characteristics.
- To match reported stolen and recovered property for purpose of case clearances and returning recovered property to owners.
- To identify active suspicious persons or suspects and persons recently returning to the community correlating them to active crime patterns.
- To develop suspect and known offender profiles (e.g., known associates, family and other person linkages, hangouts, habits, modus operandi, etc.).

FIGURE 6
CRIME ANALYSIS IN SUPPORT OF YOUTH SERVICES

Sample Objectives

- To determine patterns of youth related crimes (e.g., bicycle theft, school vandalism, etc.) to aid in assignment of cases and deployment of youth officers.
- To develop profiles on recidivist youth to aid in investigations and delivery of services.
- To identify and develop profiles of crisis families (child abuse, unfit, neglect) to aid in delivery of service and referral.
- To develop correlation patterns between criminal activity and other characteristics such as truancy, gang activity, hangouts, etc.
- To identify families who are multiagency users to aid in coordinating the delivery of services.
- To identify active suspicious youth or suspects and youths recently returning to the community correlating them to active crime patterns.

FIGURE 7
CRIME ANALYSIS IN SUPPORT OF PATROL

Sample Objectives

- To identify current or continuing crime and calls for service problems in an officer's assigned area.
- To identify active suspicious persons or suspects in an officer's assigned area.
- To provide patrol commanders with manpower requirements and allocation strategies based on temporal and spatial workload analyses and predetermined levels of service.
- To recommend short-term and long-term tactical deployment of patrol officers in response to identified crime and calls for service problems.
- To determine whether recommended tactical deployments achieved expected results or modifications.
- To support briefings of selected patrol personnel on continuing major crime problems.

FIGURE 8
CRIME ANALYSIS IN SUPPORT OF CRIME PREVENTION

Sample Objectives

- To provide information on how environmental design affects the security of various structures.
- To identify specific areas in the community having a high incidence of being a crime target and having characteristics indicating an acceptance of crime prevention measures.
- To determine types of crime prevention measures to meet needs in specific areas based on event and victim profiles.
- Determine relative results of crime prevention programs as it reduces incidence, seriousness, etc.
- Provide data of crime problems, and program results in support of public information efforts, grant application, etc.

D. PLANNING AND CRIME ANALYSIS -- A SUPPORTIVE AND COOPERATIVE ENDEAVOR

As indicated in the previous section, crime analysis supports a number of department functions, including patrol deployment, special operations and tactical units, investigations, planning and research, crime prevention, and the various administrative services, but especially budgeting and program planning. Crime analysis thus becomes an essential and integral component of the planning process. Some basic applications of crime analysis are:⁴²

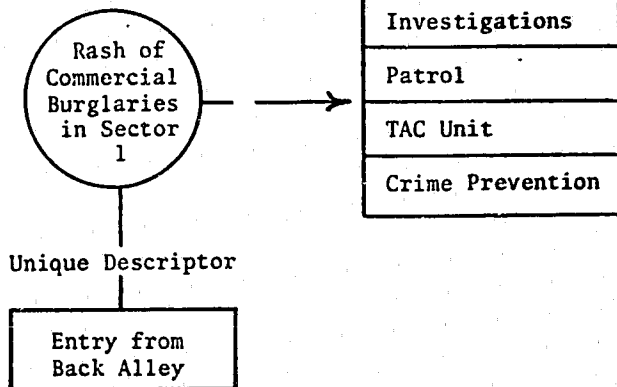
- Increase the number of cases cleared by arrest
- Provide investigative leads to detectives
- Improve operational data for patrol
- Furnish support data to public awareness and involvement programs
- Supply law enforcement related data to urban planning, building permits and codes, transportation systems, construction, etc.
- Identify evolving or existent crime patterns
- Yield substantive data for effectiveness measures of specific programs and/or agency's policies and/or procedures
- Provide supporting data for recommended crime control programs
- Furnish trend data for law enforcement planning, targeting, budgeting, and resource allocation.

Figure 9 shows the relationship between crime analysis and planning for a directed patrol operation. Figure 10 expands the deployment and decision-making (or planning) system to include the feedback process. In truth, very little planning goes into a police operation without some sort of analysis -- the better the analysis, the more effective the planning.

E. SUMMARY STATE-OF-THE-ART REVIEW

We have seen in this chapter that both planning and analysis have long been voiced as precepts for effective law enforcement. A review of recent studies reveals the existence of several planning models, yet efficient planning procedures are not commonly found in police departments across the country. The

Crime Pattern
(Crime-Specific Bulletin)



Tactical Response

- Establish relationship between cases through common investigation
- Direct patrol units to drive down alleys
- Assign discretionary patrol to problem area
- Establish rooftop surveillance of alley or other stakeout tactics
- Work with local business people on target hardening and lighting alleys; inspect locks

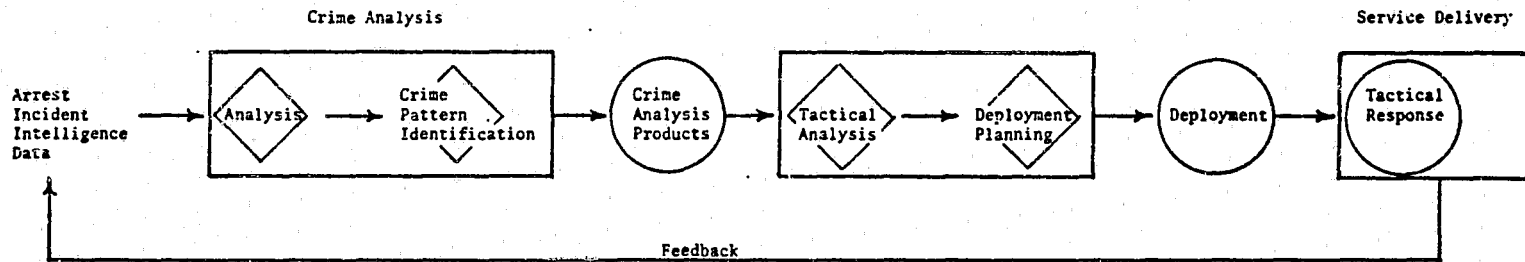
-143-

FIGURE 9
DEPLOYMENT ANALYSIS

Source: Crime Analysis Executive Manual (Preliminary Draft) Integrated Criminal Apprehension Program, LEAA, U.S. Department of Justice, April 29, 1977

CONTINUED

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FIGURE 10
DEPLOYMENT DECISIONMAKING SYSTEM

Source: Crime Analysis Executive Manual (Preliminary Draft) Integrated Criminal Apprehension Program, LEAA, U.S. Department of Justice, April 29, 1977

need for planning is a well accepted dogma; however, the need to establish a planning policy or the "plan for planning" is not well understood. Similarly, crime analysis units are widely reported to be in existence but upon closer examination, the actual analytical functions might range from simple crime tabulations and UCR reporting on the lower end of the scale to highly sophisticated modeling techniques in the upper range. Most departments fall into the lower range of simply providing rudimentary data.

There is a lack of training in formal crime analysis both from the standpoint of the technician and the police executive who must decide what to do with the data. There is evidence to suggest that the more sophisticated the analysis techniques, the less inclined are police commanders to use the data produced.

CHAPTER VI
MANAGEMENT INFORMATION SYSTEM
FOR PLANNING AND RESEARCH UNITS

A. INTRODUCTION

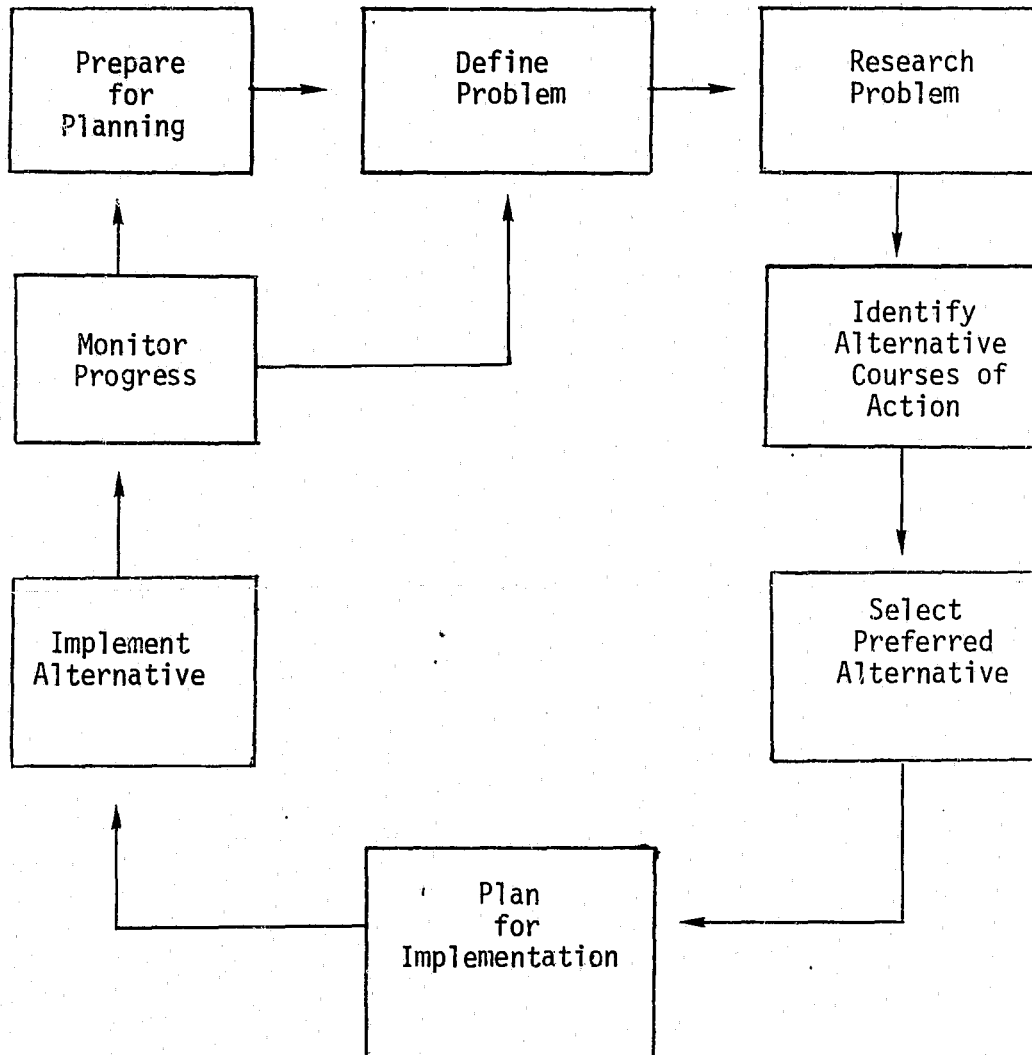
The Request for Proposal asked for the development of a Management Information System (MIS) for planning and research units as part of the evaluation efforts. After evaluating the nine projects, we have several comments to make on the relationship between a MIS and a planning and research unit. The first is that a computer-based MIS is not required. We usually think of a MIS as involving major data analysis and generation of computer reports. That is not the case with a MIS for a planning and research function. Instead, we envision a more informal system that provides the Chief of Police and other command staff with the status of the activities being performed.

More specifically, Figure 11 is a general description of the planning process in any agency for researching a particular problem. Some of the arrows really indicate decision points. For example, the planner may identify alternative courses of actions and relevant personnel must then select what is believed to be the most viable alternative. After selecting the most viable alternative, there may or may not be an implementation stage. Implementation may not occur because of budget constraints, legal consideration, or political factors. Similarly, there may be a start on implementation, but new considerations may block the full implementation of an alternative. Monitoring the progress of implementation is, therefore, an important activity to keep track of what is happening on the selected alternative.

A MIS may be required when several activities are being performed by the planner and the activities are in various stages of completion. We believe that the MIS could be comprised of four basic reports:

- Activity Schedule
- Activity Status Report
- Alternative Courses of Action Report
- Comparative Analysis of Alternative Course of Action.

FIGURE 11
PLANNING PROCESS



The Activity Schedule is initiated at the beginning of the activity and updated at appropriate times as the planning analysis continues. The Activity Status Report is a one-page report on the activity which summarizes the results of the activity to date. The Alternative Courses of Action Report is important because the development and selection of alternative actions is a key component of any planning and research activity. This report consists of a page for each alternative which provides an outline for defining a single alternative course of action. Finally, the Comparative Analysis Report is designed to lay out the alternative on one or two pages to show the alternatives in relationship to one another so that they can be compared.

These reports represent a basic MIS which any agency could implement to monitor the planning and research function. More reports could be developed by an agency if it believes a more comprehensive MIS is required.

The following section describes each report in detail.

B. DESCRIPTION OF REPORTS

Activity Schedule

Figure 12 shows an example of an Activity Schedule using the Kane County Patrol Allocation and Distribution Study from Chapter II. A complete list is shown, but in actual use we would expect that a basic schedule would be developed at the beginning of the project and updated periodically throughout the study. Copies of the schedule should be sent to the Chief and other persons directly involved in the project.

Activity Status Report

Figure 13 shows an example of a Project Status Report for the Patrol Allocation and Distribution Study. The report is intended to be only one page to highlight the progress made on the activity. It should be prepared on a regular basis -- probably once a month -- and distributed to the Chief and other command personnel. This report allows the Chief to monitor the progress of the activity from its initiation to the final implementation. Documenting the process also provides a review of when key tasks were completed and when key decisions were made.

FIGURE 12
PROJECT SCHEDULE

Planner : Jane Jones

Date:

Activity: Patrol Allocation and Distribution Study

Schedule:

| December | January | February | March |

- | | | | | |
|--|---|---|---|---|
| 1. Planning Meeting | — | | | |
| 2. Survey of Aurora Department | — | | | |
| 3. Meeting with Kane County Data Processing Unit | | — | | |
| 4. Document System of Recording Patrol Information | | — | | |
| 5. Identify Problems in Communications System | | | — | |
| 6. Develop Alternatives for Communications and Patrol Plan | | | | — |
| 7. Make Recommendations on Communications Room | | | | — |
| 8. Make Recommendations on New Patrol Areas | | | | — |

FIGURE 13
ACTIVITY STATUS REPORT

Planner: Jane Jones	Date:
Activity: Patrol Allocation and Distribution Study	
Date Activity Started: December 1, 1977	
Planned Completion Date: March 27, 1978	
Estimated Completion Date: March 27, 1978	
Results Obtained to Date: A Computerized Patrol Activity Report was developed to assist the Sheriff's Department in the evaluation of patrol officer's monthly activities. New Communications Room procedures were developed to more efficiently gather data for input. Incident and personnel identifier codes were assigned, geographical incident areas were established, new incident cards were developed and an improved time recorder was purchased.	
Tasks to Be Completed in the Next Reporting Period: We need to design and implement a system with the Data Processing Department to receive a monthly computerized budget report on Sheriff's Department personnel. This will allow for constant monitoring and evaluation of the Personnel Budget. We also need a study of the criminal investigation division to evaluate paperwork flow and to assess the feasibility of a case priority system. The study should determine whether a Case Status Tracking System can be implemented.	
Professional Hours Spent on This Activity During This Reporting Period: <u>80</u>	

Alternative Courses of Action Report

This report is a one page report on each alternative course of action. An example is shown in Figure 14. The intent of this report is to briefly describe a course of action along with its advantages and disadvantages. A separate page is completed for each alternative action. The advantages and disadvantages do not have to be quantitative but the planner should not be biased towards one course of action. There are no perfect solutions to problems. Selecting an alternative involves the consideration of tradeoffs among advantages and disadvantages. It is sometimes advisable for the planner to play the role of a "Devil's Advocate" in describing alternatives. At any rate, this report is a good vehicle for laying out courses of action and forcing decisions to be made.

Comparative Analysis of Alternative Courses of Action

This report is a companion to the Alternative Courses of Action Report. An example is shown in Figure 15. The Comparative Analysis Report allows the Chief or command staff to quickly see the various possibilities for solving a problem. It could be most useful as the basis for a meeting to discuss the alternatives. Another procedure is for the planner to request key personnel to rank each alternative. This participation by others is useful when the courses of action are complex or the actual outcomes are uncertain. The report provides a formal and logical method for continuing the planning process.

C. SUMMARY COMMENTS

A MIS for the planning and research function can be a good tool for monitoring and controlling the planning activities. It is most useful when the agency is involved in several activities which is typically the case under a planning grant. One word of caution is necessary. A MIS should not be established just for the sake of having one. The paperwork for a MIS can be extensive and can easily get out of control. Flexibility is the key. The Chief and planner can use the four reports just described and tailor them to their particular environment. In this way, the MIS can become a useful tool in monitoring the planning process.

FIGURE 14

ALTERNATIVE COURSES OF ACTION

Planner: Jane Jones	Date:
Activity: Patrol Allocation and Distribution Study (Investigative Case Management Study)	
Short Description of Possible Courses of Action: 1. Establish a case status tracking system for handling inquiries on the status of a case. This system is needed since the Department has recently initiated a new policy to encourage patrol officers to conduct preliminary investigations.	
Advantages of This Course of Action: 1. Would decrease the time now required to handle inquiries. 2. Would improve control of caseload.	
Disadvantages of This Course of Action: 1. Increases paperwork for investigators. 2. Report flow processing will have to be improved.	

FIGURE 15
COMPARATIVE ANALYSIS

<p>Planner: Jane Jones Date:</p> <p>Activity: Patrol Allocation and Distribution Study (Investigative Case Management Study)</p>
<p>Alternative One:</p> <p>Establish a Case Status Tracking System. The system would track a case through the investigative process from officer contact to final disposition. It would facilitate inquiries on case status.</p> <p>Advantages:</p> <ol style="list-style-type: none">1. Would decrease the time now required to handle inquiries.2. Would improve control of case load. <p>Disadvantages:</p> <ol style="list-style-type: none">1. Increases paperwork for investigators.2. Report flow processing will have to be improved.
<p>Alternative Two:</p> <p>Keep the current system, but hire more personnel to maintain it.</p> <p>Advantages:</p> <ol style="list-style-type: none">1. No changes in procedures would be required. <p>Disadvantages:</p> <ol style="list-style-type: none">1. Costs of more personnel may be prohibitive.

APPENDIX A
THE PLANNING IMPLEMENTATION PROCESS

APPENDIX A
THE PLANNING IMPLEMENTATION PROCESS*

Relative to the planning process, LeBreton suggests a planning-implementation model which has three major components: the planning-implementation process, dimensions, and the relation of dimensions to the process.

The Planning Process: The planning process contains fourteen steps or units which are suggested as a comprehensive guide only. In actual practice, a given planner will work out his own process. Figure A-1 outlines the significant components of each step along with a list of the possible alternatives the planner may face at each step.

The Implementation Process: The implementation process is summarized in Figure A-2, and contains a list of factors suggesting concerns to the implementator. Steps 7 through 14 are action-oriented steps. The significant factors likely to be considered under each step are presented in the form of things to be accomplished.

The Dimension Concept: The dimension concept helps the planner to understand the nature of the variations occurring in the planning and implementation processes as different activities are considered. Seventeen dimensions characterize either the planning process or the implementation process.

These are:

- | | |
|-----------------------|-------------------------|
| 1. Complexity | 10. Available time |
| 2. Significance | 11. Confidential nature |
| 3. Scope or magnitude | 12. Clearness |
| 4. Comprehensiveness | 13. Formality |
| 5. Frequency | 14. Specificity |
| 6. Duration | 15. Completeness |
| 7. Uniqueness | 16. Accuracy |
| 8. Authorization | 17. Stability |
| 9. Flexibility | |

* Source: Effective Police Management, Volume IV, Gourley, G. Douglas and the faculty of the Department of Police Science and Administration of California State College at Los Angeles. Submitted to the President's Commission on Law Enforcement and the Administration of Justice, 1967. pp 1042-1062.

FIGURE A-1
PLANNING PROCESS*

Significant Components	Reasonable Alternatives
1. <u>Need Determination</u> (Becoming aware of a possible need to plan)	
a. What are the sources of planning ideas?	Immediate superiors or subordinates, peer groups, staff units, employees, board of directors, individual himself, suppliers, distributors, customers
b. What is the nature of the idea?	Equipment replacement, new product design, pricing policy, new facility acquisition
c. Who receives the idea for consideration?	Any administrator within the organization
d. What is the form in which ideas are presented?	Formal controls or systematic audit reports, directives, suggestions, recommendations, requests, concepts
e. How are the ideas evaluated?	See all of item 10
2. <u>Objective</u> (Formulating a precise statement of the objective of the plan)	
a. What is the nature of the statement of objective?	Replacement of equipment items A, B, C; reduce the expense of handling incoming supplies; establish an on-the-job training program for unskilled employees in assembly section of production department
b. In what form is the objective presented?	Formal report form, general statement of intent
c. Who determines the objective?	Planner, superior at higher level
3. <u>Preparing Proposal</u> (Preparing a broad outline of plan or proposal)	
a. What is the nature of the proposal?	See sections 1b and 2a
b. What are the anticipated results?	Reduction of expenses of \$10,000 a year, turnover reduced among office help from 7 percent to 5 percent
c. What is the supporting evidence indicating need to plan?	Facts about present intention, opportunity for improvement, case study, illustrations, descriptive explanation
d. What are the resource requirements for planning?	Personnel cost, machinery and equipment costs, clerical costs, transportation costs

Source: Preston P. LeBreton, General Administration: Planning and Implementation (New York: Holt, Rinehart and Winston, 1965), pp. 45-50.

FIGURE A-1 (Continued)

- e. What is the information acquisition subplan? See all of item 8
 - f. What is the evaluation and choice system subplan? See all of items 9 and 10
 - g. What is the proposed test program? See all of item 11
 - h. What is the time schedule for the planning process? Hours, weeks, months for various parts and plan in total
4. Obtaining Approval
(Obtaining approval of the proposal)
- a. Who will make the presentation? Planner, a superior of planner
 - b. Who will receive the presentation? Line officials, board of directors, staff units, combination line and staff
 - c. What is the form of the presentation? Oral, written, combination, formal informal
 - d. What is the purpose of the presentation? Informational, to "sell" the program, to receive reaction
 - e. What are the results of the presentation? Complete approval, partial approval, complete refusal
5. Organizing for Planning
(Organizing planning staff and assigning responsibility)
- a. Who will be assigned to the staff? Staff and line personnel, outside consultants
 - b. Who makes the assignment? Planner, a line superior, staff department head
 - c. What is the nature of the authority and responsibility assigned? Provide information only, alternative courses of action, specific course of action, interpretation of facts
 - d. What will be the organization form of the planning staff? One individual, organization unit, ad hoc committee, permanent committee
 - e. How is the staff notified of its assignment? Oral, written, combination; formal, informal
6. Determining Specific Outline of Plan
- a. What is the information acquisition plan? See all of item 8
 - b. What is the evaluation and choice system? See all of items 9 and 10
 - c. What is the test program? See all of item 11
 - d. What form will the final plan take? See all of item 12
 - e. What is the control program for the completed plan? Specific and complete with standards of measurement, control process and reporting system
Suggestive of need for plan to be prepared by implementor

FIGURE A-1 (Continued)

- f. What is the internal control subplan? Planner formulates rough estimate of deadline dates. Specific in every detail with tight control points

7. Establishing Contact with Cooperating Groups

- a. Who is to be contacted? Provider of information, decision assistants, testing assistants; their superiors
- b. Who is to make contact? Planner, his superior
- c. What will be the form of contact? Informal, formal, oral, written
- d. What is the nature of the information to be given? Nature of project, nature of assistance desired
- e. When will the contact be made? In advance of scheduled meeting for interview, at time of meeting

8. Obtaining Necessary Data

- a. What is the nature of the data to be obtained? Sales results, production costs, yearly turnover figures, consumer attitudes, employee morale
- b. What is the method to be used to collect this data? Observation, interviewing, experimentation, testing
- c. What are the sources of required data? Employer, administrators, customers, distributors, suppliers, records, reports
- d. Who will acquire the information? Planner, member of planning staff including consultants
- e. What will be the form in which data will be received? Report, oral communication

9. Evaluating the Data

- a. How is the source evaluated? Past experience with source, others who have used source
- b. How is the method used to collect data evaluated? Check competence of individual collector, tools, techniques used
- c. How are the data evaluated? Spot check, independent check, submit to superior for verification

10. Formulating Tentative Conclusions and Preparing Tentative Plans

- a. What is the objective of the plan? See item 2a
- b. What are the alternatives? All available, a few, many, five sites, ten sites, three sites
- c. What are the significant variables? Few major variables, complete lists of variables, those pertaining to technical decisions only, those pertaining to implementation needs as well
- d. What are the relative weights to be assigned variables? Precise and complete for all significant variables. Fairly general and somewhat complete

FIGURE A-1 (Continued)

- | | | |
|----|--|--|
| e. | What is the degree of certainty that events will occur as anticipated? | Elaborate schedule of varying degrees of certainty, intuitive assumption that events will occur as anticipated |
| f. | What are the decision rules?
What is the final solution? | Technical decision, personal consideration added |
11. Testing
(Testing components of tentative plan and making adjustments where necessary)
- | | | |
|----|---|--|
| a. | What components are to be tested? | Significant components, all components |
| b. | What is the nature of the tests? | Technical accuracy of solution, workability of solution |
| c. | Who is responsible for administering the tests? | Member of planning staff, separate unit within organization, outside organization |
| d. | How are test results reported? | Informal, general report, formal report with statement of test used, test results, and recommendations |
| e. | What are the results of the tests? | Decision as to whether or not a change is necessary |
12. Preparing the Final Plan
- | | | |
|----|--|---|
| a. | What is the nature of the plan? | See items 2a and 3a. New salary structure, reorganization plan, equipment to be purchased |
| b. | Who was involved in the planning process? | See all of item 5 |
| c. | What are the anticipated results? | See item 3b |
| d. | What is the time schedule for implementation? | See item 3h |
| e. | What are the resource requirements for implementation? | See item 3d |
| f. | What is the nature of the supporting evidence? | See items 3c |
13. Testing Plan
(Testing the plan and making adjustments where necessary)
- | | | |
|----|--|--|
| a. | What components are to be tested? | See item 11a |
| b. | What is the nature of the test? | See item 11b, also test for salability of plan |
| c. | Who is responsible for administering the test? | See item 11c |
| d. | How are test results reported? | See items 11d |
| e. | What are the test results? | See item 11e |

FIGURE A-1 (Continued)

14. Gaining Approval of Plan

- | | | |
|----|---|--|
| a. | Who makes the presentation? | Planner, his superior, consultant, staff specialists, combination of all previously mentioned |
| b. | Who receives the presentation? | Board of directors, executive committee, senior line administrators, senior staff administrators, combination of above |
| c. | What is the form of the presentation? | See item 4c |
| d. | What is the purpose of the presentation? | See item 4d |
| e. | What are the results of the presentation? | See item 4e |

FIGURE A-2

IMPLEMENTATION PROCESS*

<u>Significant Components</u>	<u>Reasonable Alternatives</u>
<u>1. Receipt of Approved Plan</u>	
a. What is the nature of the plan?	Equipment replacement, new product design, pricing policy, new facility acquisition, change in organization relationships
b. What is the form in which it is received?	Directive, request, recommendation
c. What is the source of the plan?	Immediate superior, president, board of directors
d. Who receives the plan?	Any administrator within the organization
<u>2. Obtaining an Understanding of Technical Components of the Plan</u>	
a. What is the nature of the plan?	Equipment replacement, new product design, pricing policy, new facility acquisition, change in organization relationships
b. What is the significance (expectations) of the change?	Improved efficiency of 5 percent, increase in sales of 10 percent
c. What is the magnitude of the program?	Affect interrelationships of all staff and line units, replacement of a few operating individuals within one unit
d. What is the time schedule for implementation?	One week, month, year, several years
<u>3. Interpretation of Ramifications of Plan</u>	
a. What is its significance to the organization?	Change of product line may allow company to continue in business, office layout change should increase efficiency by 3 percent
b. What is its significance to the implementor?	Change in his work relationship with peer groups, require the acquisition of a new administrative approach
c. What is its likely impact on employees?	Some will be given new assignments, considerable retraining, relocation
d. What is its likely impact on individuals other than employees?	Community will lose considerable consumer buying power, reduction in tax receipts, loss of distributor or vendor
e. What is its importance to the approving agent?	Change in subordinate relationships, facilitate handling of his assignment, less direct intervention into day-to-day activities
<u>4. Determination of Role of Implementor</u>	
a. What are the requirements of the plan?	Direct the actual change desired, inform others of change need but no direct responsibility for directing change

*Source: Preston P. LeBreton, General Administration: Planning and Implementation (New York: Holt, Rinehart and Winston, 1965), pp. 127-132

FIGURE A-2 (Continued)

- b. What authority does he have? Full authority to disagree with plan and make appropriate changes where necessary, no authority to deviate from approved plan

5. Organizing Implementation Staff and Assigning Responsibility

- a. Who will be assigned to the staff? Peer groups of administrators, key subordinate administrators, and non-administrators, staff specialists
- b. Who makes the assignment? Implementor provided with the plan
- c. What is the nature of the authority and responsibility to be assigned? Advisory, interpretation of facts, change in program where necessary
- d. What will be the organization form of the implementation staff? Ad hoc committee, permanent committee, one individual, formal organization unit

6. Preparation of an Implementation Plan

- a. What kind of action is necessary to initiate the program? Preparation of work order, directive, informal notice
- b. How will individuals in general be notified of new program? Written formal notice, informal conversation, committee meeting
- c. How will the program be interpreted to affected subordinates? Individual meetings with each affected subordinate, group meetings, general announcement
- d. How will subordinates be instructed in their control assignments? See item 6c
- e. What will be the implementation time schedule? A few days, weeks, months, a year or more
- f. How will data be gathered and processed? Operating group, implementation team, observation, reports
- g. What will be the basic control plans? Achievement of program as scheduled, measure of results achieved against expectations, measure of significant factors in environment
- h. What kind of reporting system is needed? Formal or informal daily or weekly progress, formal or informal report of results at end of implementation period

7. Taking Action and Making Necessary Commitments

- a. What is the form of the commitment? Contract, work order, policy statement, position description
- b. Who makes the commitment? Implementor, superior or subordinate administrator, staff specialists
- c. What is the nature of the commitment? Tentative, binding, probation agreement

FIGURE A-2 (Continued)

8. Notifying Organization Members of the Program

- | | | |
|----|--|--|
| a. | Who is to be notified? | All organization members or only affected groups, public at large or affected members of community |
| b. | What is the accepted form of notification? | Formal announcement, superior direct to subordinates, organization's house organ, trade publications, local news media |
| c. | What will be covered in the notification? | Technical components of the plan, reasons and justifications for change, anticipated results |
| d. | What is the timing of the announcement? | After final decision on plan, after full implementation of change, after change has been tested for effectiveness |
| e. | Who is to give the notification? | Implementor, planner, staff unit, top management, board of directors |

9. Interpretation of Operational Plans to Affected Subordinates

- | | | |
|----|---|---|
| a. | Who is to be notified? | Persons directly affected, their subordinates, peer groups not directly affected |
| b. | What is the accepted form of notification? | Formal announcement, personal notification superior to subordinate |
| c. | What will be covered in the interpretation? | See items 8c |
| d. | What is the timing of the interpretation? | As close as possible to receipt of approved plan, after review of plan by implementor |
| e. | Who is to give the interpretation? | Chief implementor, immediate superior to affected subordinate, unit administrator below chief implementor but above immediate administrator |

10. Instruction of Subordinates in Their Control Assignment

- | | | |
|----|---|---|
| a. | Who is to be instructed? | Lower levels of supervision, individuals directly concerned with implementation effort |
| b. | What is the accepted form of instruction? | Formal presentation, open discussion |
| c. | What will be covered in the instruction? | Specific responsibility of each person for various parts of control program, general description of control program |
| d. | What is the timing of the instruction? | Before implementation begins, as implementation progresses |
| e. | Who is to give the instruction? | The chief implementor, planner, staff unit, immediate supervisor |

11. Gathering Data on Progress of Plan

- | | | |
|----|--|---|
| a. | What is the nature of the data obtained? | Production figures, sales results, turnover, and absentee rates |
| b. | What is the method to be used to collect the data? | Questionnaire, direct observation, interview check of records |

FIGURE A-2 (Continued)

- c. What are the sources of required data? Individual operator and his records, immediate supervisor, accounting department, trade publications
- d. Who will acquire the data? Chief planner, chief implementor, immediate supervisor, chief executive
- e. What will be the form in which data will be received? Raw statistics, finished reports, comparative studies, interpretive reports

12. Review and Evaluation of Data

- a. How is the source evaluated? Past performance, qualifications of individuals submitting data, reputation of source
- b. How is the method of data collection evaluated? Adequacy of sample, reliability of questions asked, accuracy of tabulation
- c. How are the data evaluated? Consistency of results, completeness and preciseness of results reported

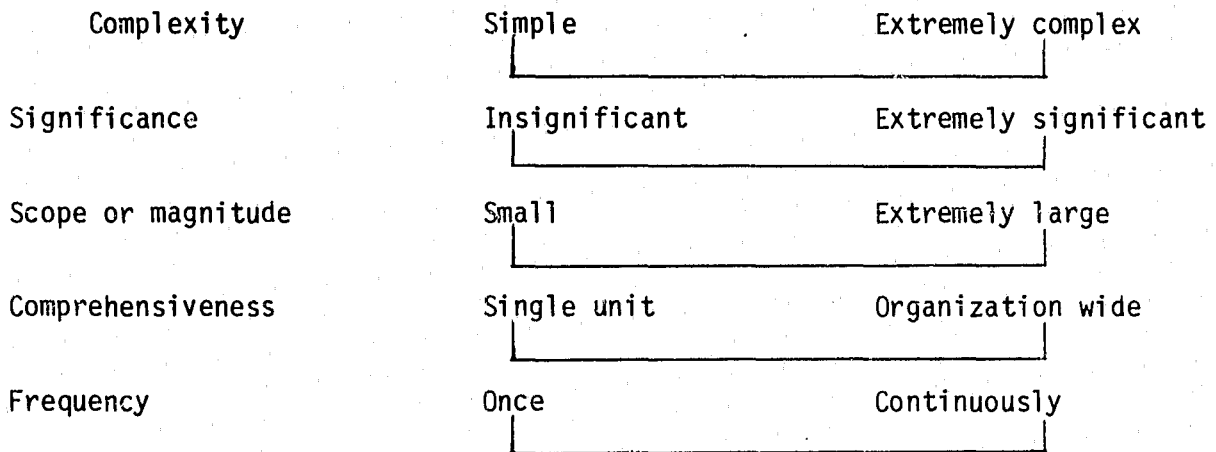
13. Taking Corrective Action When Necessary

- a. What is the nature of the variance? Time delay, results less than planned for, greater expense
- b. What is the significance of the variance? Sufficient to require some change in plan, relatively unimportant to basic components of plan
- c. What is the cause of the variance? Estimate unrealistically high, poor plan, inadequate implementation efforts, unexpected shift in market conditions
- d. What is the nature of the corrective action? Complete stoppage of implementation efforts, major revision of one or more components of plan, extension of time element
- e. How is the correction to be instituted? Change implementation team, use of consultants, continue with implementation team

14. Reporting Progress to Authorized Personnel

- a. What is to be reported? Results achieved, results relative to expectations, evaluation of results
- b. What is the reporting form? Formal official document, informal report at regular meeting, annual report
- c. Who is to do the reporting? Chief planner, chief implementor, immediate supervisor, staff unit
- d. Who receives the report? Immediate supervisor, senior executive, president, board of directors
- e. When is the report to be submitted? Immediately after expiration of scheduled completion date, actual time of completion, end of fiscal year.

The way in which a given function is planned and then put into operation may be influenced by the intensity with which dimensions occur. The intensity of dimensions are seen across a continuum from low to high, little to great, or few to many. Some examples are appropriate.



The complexity factor ranges from simple to highly complex, the significant factor from insignificant or relatively unimportant to extremely significant, the scope or magnitude from small to extremely large, comprehensiveness from a single unit to the entire organization and frequency from a single occurrence to continuous. Between these extremes there are additional gradations such as fairly complex and complex for the complexity dimension.

The dimensions concept helps one understand the nature of the various plans that are prepared and implemented by each administrator and for the organization as a whole. At this stage of our presentation we are concerned with a descriptive account of how the administrative process is handled and of the influence dimensions seem to have on the various steps of the planning and implementation process.

Note that the same general dimensions are used for both the planning and the implementation processes. The definitions given to each dimension will vary between the two processes. In each case we take the frame of reference of either the planner or the implementor. The planner, viewing his assignment, will interpret complexity as it relates to the technical nature of material to be covered. He thinks of the difficulty the complexity factor will place on his planning process. This might include the use of sophisticated tools of

analysis. the implementor, on the other hand, may view complexity as it relates to the problem of introducing significant change to a large unit.

Impact of dimensions: The third major component of the model is the impact of dimensions upon the planning and implementation processes. It is important to know the relationship between dimensions such as complexity, significance, comprehensiveness, and frequency, and the processes. One step is to observe a variety of plans differing in the intensity with which dimensions occur and record the variations. After this has been done and the reasons established for the variations, hypotheses can be formulated and then tested.

It is suggested that the use of dimensions and the planning and implementation processes will help to focus attention upon a new set of problems and that solutions will be presented in a form useful to individuals interested in a variety of tasks.

LeBreton suggests that the planning-implementation model can assist in an evaluation of how well an observed administrative process is working.

The way in which each significant subpart of the process is handled can be tested against existing theory and accepted principles. In addition, or separately, each significant part of the processes or the process as a whole can be measured against results achieved.

Hopefully the study will direct attention to those areas where theories and principles are lacking.

Thus, the model may serve at least six purposes:

1. Assist in understanding how the administrative process is carried out in all kinds of organizations.
2. Assist in understanding why the process is carried out in a certain manner.
3. Assist in determining the results that are likely to be achieved from following a given process.
4. Assist in understanding the planning and implementation needs of of organization and thus guide administrators in their efforts.

5. Assist in auditing a planning and implementation process.
6. Assist in developing hypotheses that will lead to the development of new theories and principles.

The detailed summary of LeBreton's model was reproduced in this report as it represents the most thoughtful, complete, and comprehensive view of the planning process that has appeared in the management literature.

APPENDIX B
A MODEL OF MANAGEMENT PRACTICE

APPENDIX B
A MODEL OF MANAGEMENT PRACTICE*

A model of management practice and its relation to the planning process is shown in Figures B-1 and B-2.

House and McIntyre suggest that this model can be an operational tool -- a checklist for action and sequence of operation. For example, Step 6 of planning should be completed before one starts to organize, one should complete Step 7 of organizing before starting to motivate, and Step 3 of motivating should be completed before one starts to control. Reference to the model will indicate why the steps should be performed in sequence. This is not to say that these steps cannot or must not be performed out of sequence, but the model serves as a guide to the ideal sequence.

* Source: Effective Police Management, Volume IV, Gourley, G. Douglas and the faculty of the Department of Police Science and Administration of California State College at Los Angeles. Submitted to the President's Commission on Law Enforcement and the Administration of Justice, 1967. pp. 1062-1-54.

FIGURE B-1
MODEL OF MANAGEMENT* PRACTICE

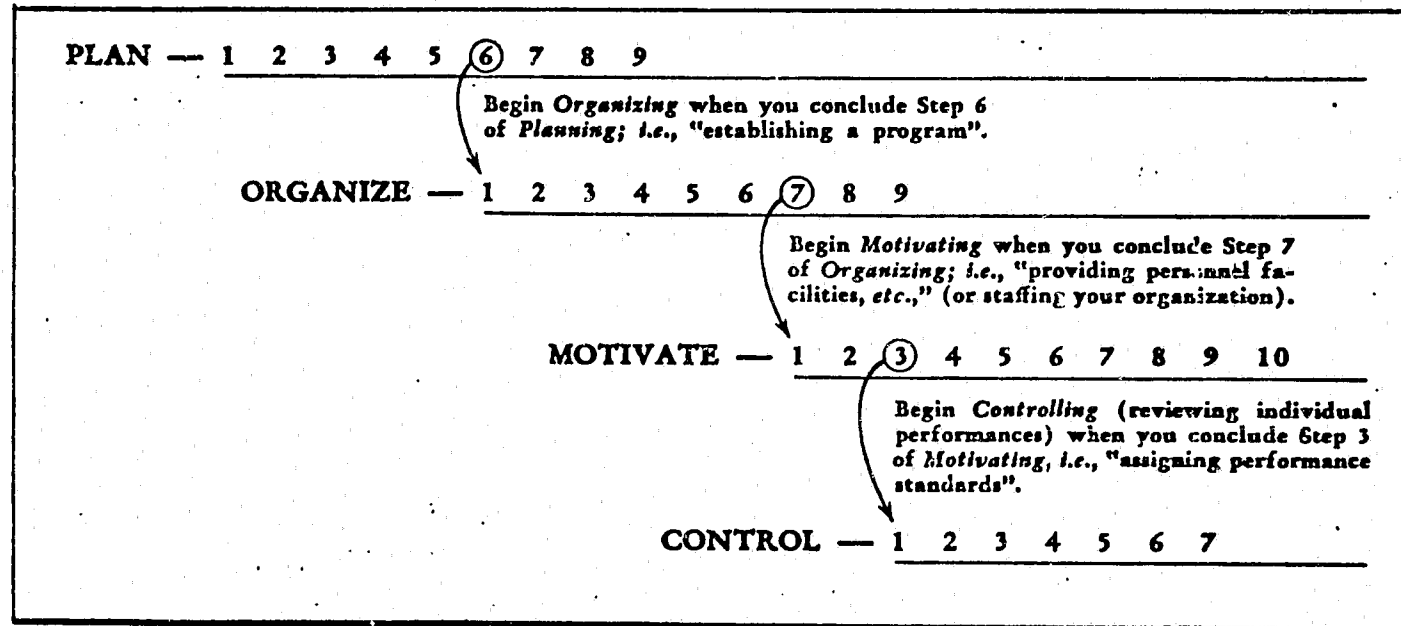
<u>Plan</u>	<u>Organize</u>	<u>Motivate</u>	<u>Control</u>
1. Forecast.	1. Identify and define work to be performed.	1. Communicate and explain objectives and goals to subordinates.	1. Review operations.
2. Establish conditions and assumptions.	2. Break work down into operative duties.	2. Assign work to be performed, accountability, and extent of authority.	2. Compare results against goals (sub-objectives).
3. Establish objectives.	3. Establish an ideal organizational concept.	3. Assign performance standards.	3. Appraise results against performance standards and policies.
4. Anticipate possible future problems.	4. Group operative duties into operative positions.	4. Coach and guide subordinates to meet performance standards.	4. Determine reasons for exceptions.
5. Establish policies.	5. Group operative positions into manageable and properly related units.	5. Train and develop subordinates to realize full potential.	5. Record.
6. Establish a program of accomplishment.	6. Define position requirements.	6. Provide a motivating environment by communicating the changing situation and its requirements.	6. Revise and adjust control methods in light of control results.
7. Plan standards and methods of measuring accomplishment.	7. Provide personnel facilities and other resources.	7. Praise and censure fairly.	7. Coordinate / throughout the control process.
8. Revise and adjust the plan in light of control results and changing conditions.	8. Revise and adjust the organization in light of control results.	8. Reward subordinates based on performance.	
9. Coordinate / throughout the planning process.	9. Coordinate / throughout the organizing process.	9. Revise and adjust the work of motivation in light of control results.	
		10. Coordinate / throughout the motivating process.	

* Management is the vocation of achieving desired results through other people.

/ Coordination is the consideration of relationships and/or utilization of activities outside a chain of command.

Source: R. J. House and J. M. McIntyre, "Management Theory in Practice," Advanced Management, October, 1961, (reprint, 8 pages).

FIGURE B-2
 CLASSICAL MANAGEMENT THEORY IN PRACTICE*



B-3

*Source: R. J. House and J. M. McIntyre, "Management Theory in Practice," Advanced Management, October, 1961, (reprint, 8 pages).

END